Electone

EL-900m

Upgrade Kit

OWNER'S MANUAL

YAMAHA

SPECIAL MESSAGE SECTION

PRODUCT SAFETY MARKINGS: Yamaha electronic products may have either labels similar to the graphics shown below or molded / stamped facsimiles of these graphics on the enclosure. The explanation of these graphics appears on this page.
Please observe all cautions indicated on this page and those indicated in the safety instruction section.

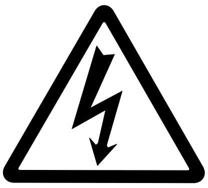
CAUTION
RISK OF ELECTRIC SHOCK. DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

See the name plate for graphic symbol markings.



The exclamation point within the equilateral triangle is intended to alert the user to the present of important operating and maintenance (servicing) instructions in the literature accompanying the product.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

IMPORTANT NOTICE: All Yamaha electronic products are tested and approved by an independent safety testing laboratory in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commission others to do so unless specifically authorized by Yamaha.
Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

SPECIFICATIONS SUBJECT TO CHANGE: The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

ENVIRONMENTAL ISSUES: Yamaha strives to produce products that are both user safe and environmentally friendly.
We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

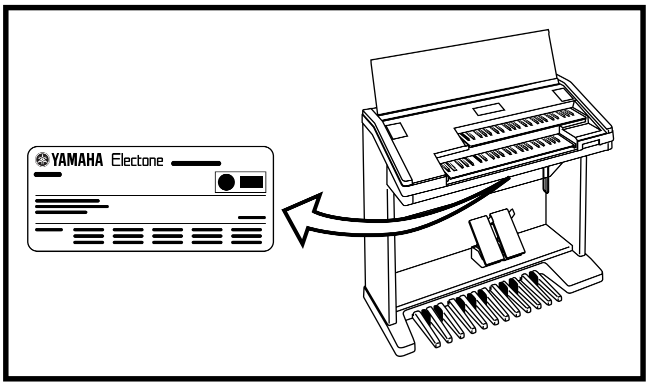
BATTERY NOTICE: This product MAY contain a small nonrechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

WARNING: Do not attempt to recharge, disassemble, or incinerate this type of battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by applicable laws. Note: In some areas, the servicer is required by law to return the defective parts. However, you do have the option of having the servicer dispose of these parts for you.

DISPOSAL NOTICE: Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc.

NOTICE: Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacture's warranty, and are therefore the owner's responsibility.
Please study this manual carefully and consult your dealer before requesting service.

NAME PLATE LOCATION: The graphic below indicates the location of the name plate. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.



Model ______________________

Serial No. ______________________

Purchase Date ______________________

92-469-①

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep these precautions in a safe place for future reference.

⚠ *WARNING*

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- If the power cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.
- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Before cleaning the instrument, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hands.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.

⚠ *CAUTION*

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:

- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.
- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum. Also, be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not use the instrument near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of the other products.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables.
- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Take care that the key cover does not pinch your fingers, and do not insert a finger or hand in the key cover gap.
- Never insert or drop paper or metallic or other objects between the slits of the key cover and the keyboard. If this happens, immediately turn off the power and remove the electric plug from the outlet and have the instrument inspected by qualified Yamaha service personnel.
- Do not place the instrument against a wall (allow at least 3 cm/one-inch from the wall), since this can cause inadequate air circulation, and possibly result in the instrument overheating.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

■ USING THE BENCH

- Do not play carelessly with or stand on the bench. Using it as a tool or step-ladder or for any other purpose might result in accident or injury.
- Only one person should sit on the bench at a time, in order to prevent the possibility of accident or injury.
- If the bench screws become loose due to extensive long-term use, tighten them periodically using the included tool.

■ SAVING USER DATA

- Always save data to a floppy disk frequently, in order to help prevent the loss of important data due to a malfunction or user operating error.

Always turn the power off when the instrument is not in use.

Congratulations!

This manual provides the information related to the newly upgraded features and functions, difference between EL-900 and EL-900m. You can enjoy specially tailored sophisticated voices, convenient and versatile voice display functions, voice editing even with VA voices and more.

Included Items

Registration Menu Disk
3.5" Floppy Disk
Owner's Manual
To Authorized Service Personnel

Turning the Electone off erases all panel settings you have made. When the Electone is turned on, Basic Registration 1 is automatically selected. If you have made panel settings you wish to keep, save them to Registration Memory before turning the Electone off.

GM (General MIDI System Level 1) is an addition to the MIDI standard which ensures that any GM-compatible music data can be accurately played by any GM-compatible tone generator, regardless of maker. The GM mark is affixed to all software and hardware products that support the General MIDI standard.

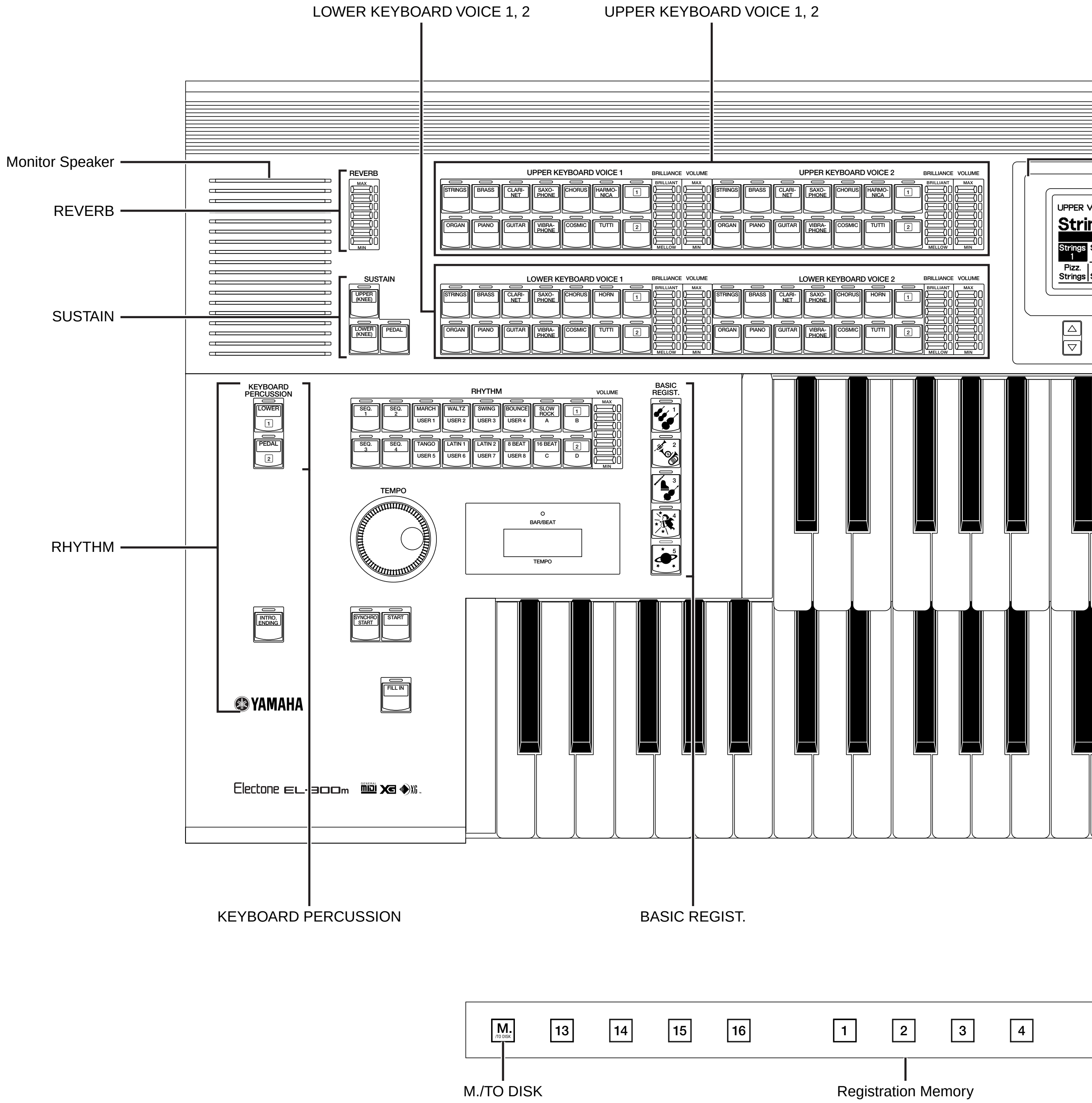
XG is a new MIDI format created by Yamaha which significantly improves and expands upon the General MIDI standard by providing a greater variety of high-quality voices plus considerably enhanced effect operation—while being fully compatible with GM.

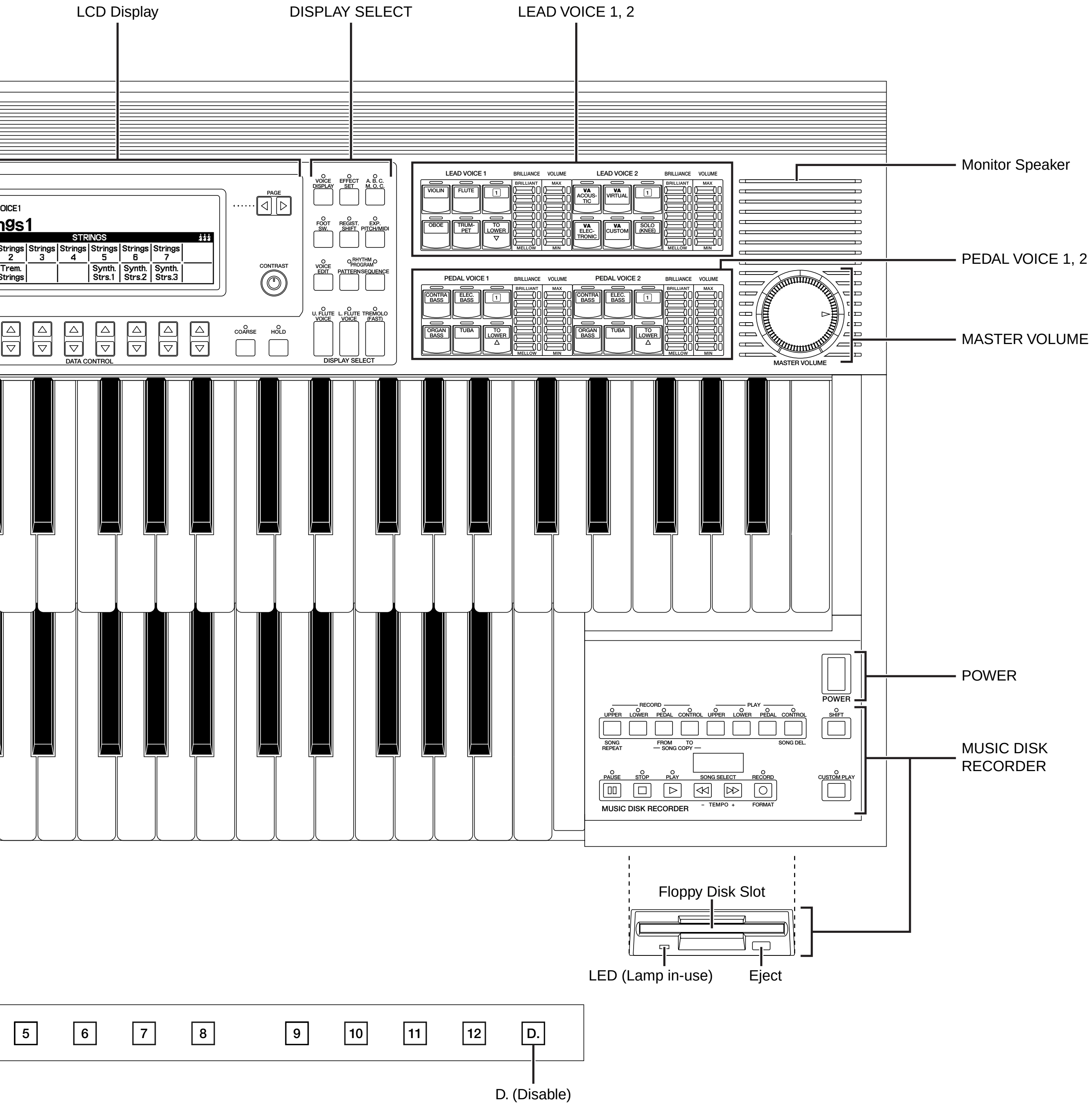
Products bearing the SONDIUS-XG logo are licensed under patents of Stanford University and Yamaha as listed on the internet web site, <http://www.sondius-xg.com>.

- The screen displays and illustrations as shown in this owner's manual are for instructional purposes only, and may appear somewhat different from those on your instrument.
- Copying of the commercially available music sequence data is strictly prohibited except for your personal use.
- The company names and product names in this Owner's manual are the trademarks or registered trademarks of their respective companies.

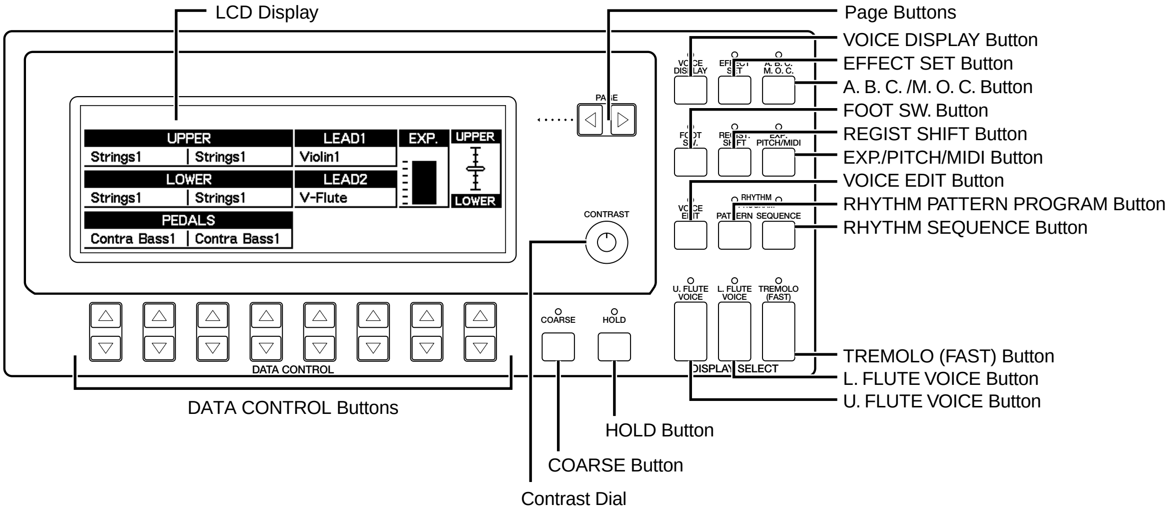
Table of Contents

EL-900m Panel Layout

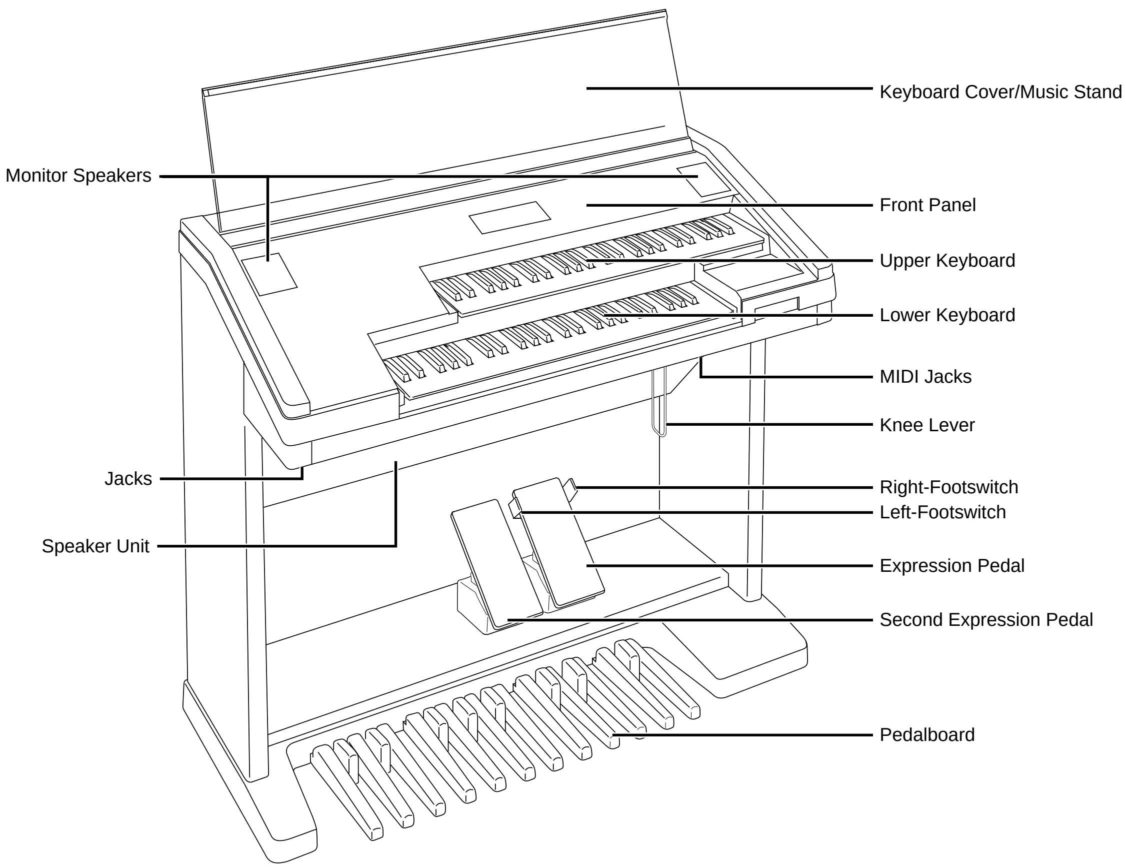



LCD Display
DISPLAY SELECT
LEAD VOICE 1, 2
Monitor Speaker
PEDAL VOICE 1, 2
MASTER VOLUME
POWER
MUSIC DISK RECORDER
Floppy Disk Slot
LED (Lamp in-use)
Eject
5
6
7
8
9
10
11
12
D.
D. (Disable)

LCD Display/Display Select



Others

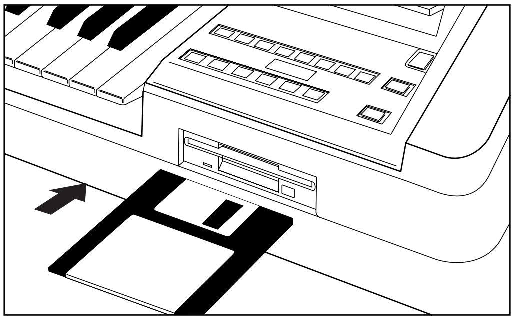


1 Registration Menu Disk

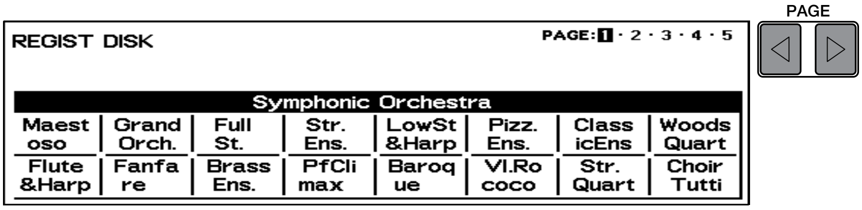
The contents of the registrations have been perfected with the new voice combinations, compared to the ones of El-900.
80 registration patterns in five basic categories are available for you to play.

To use the Registration Menu:

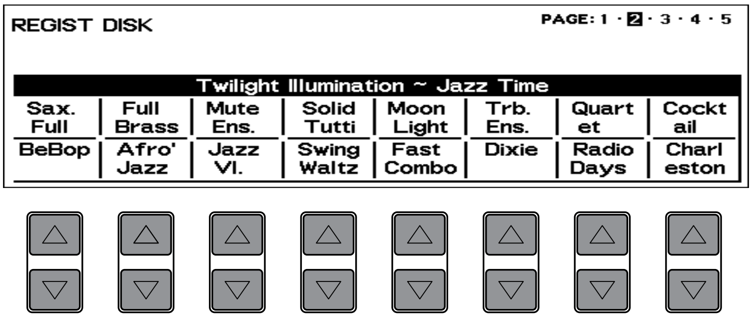
1 Insert the included Registration Menu disk in to the slot.



2 Select the desired page, or the category you want to use, by pressing the Page buttons.



3 Select the registration by pressing the appropriate Data Control buttons.



* Each registration is preset with various functions, rhythm, effects, panning, etc., all suited to the voices.
The voices are elaborately combined to bring out the characteristics of each voice. You can use them as your good reference when you create your own registrations.

Take a brief look at each menu.

(page 1)

REGIST DISK PAGE: **1** · 2 · 3 · 4 · 5

Symphonic Orchestra							
Maest oso	Grand Orch.	Full St.	Str. Ens.	LowSt &Harp	Pizz. Ens.	Class icEns	Woods Quart
Flute &Harp	Fanfa re	Brass Ens.	PfCli max	Baroq ue	Vl.Ro coco	Str. Quart	Choir Tutti

(page 2)

REGIST DISK PAGE: 1 · **2** · 3 · 4 · 5

Twilight Illumination ~ Jazz Time							
Sax. Full	Full Brass	Mute Ens.	Solid Tutti	Moon Light	Trb. Ens.	Quart et	Cockt ail
BeBop	Afro' Jazz	Jazz Vl.	Swing Waltz	Fast Combo	Dixie	Radio Days	Charl eston

(page 3)

REGIST DISK PAGE: 1 · 2 · **3** · 4 · 5

Latin							
Samba Brass	Samba Light	Bossa Combo	Bossa Str.	Mambo Slow	Mambo Fast	Rhumb a	Begui ne
Cha - Cha	Salsa	Tango Argen	Tango Conti	Mexic an	Viva! Bamba	Jamai can16	Jamai can12

(page 4)

REGIST DISK PAGE: 1 · 2 · 3 · **4** · 5

Dance & Fusion							
Disco	Dance Pop	Euro Beat	World Cup	Funk	Dance Class	R&R	Twist
Bounc e	Brite Piano	Sax.& Synth	JazzF usion	Ocean Gtr.	16Bt. Pf	16Bt. Balad	16Bt. Latin

(page 5)

REGIST DISK PAGE: 1 · 2 · 3 · 4 · **5**

Black & White ~ Organ Sounds							
Strai ght	Clust er	Dry Combi	Fat & Rich	Moody	Full Balad	Light Combi	Organ Cla.
White Shade	Pale Great	Metal Combi	Blues	Cathe dral	Chape l	Carou sel	Stadi um

Each registration is briefly described in the following tables.

Registration Menu List

Page 1: Symphonic Orchestra

	LCD (Name)	Content
1	**Maestoso**	Symphonic Orchestra 1
2	**GrandOrch.**	Symphonic Orchestra 2
3	**Full St.**	String Ensemble 1
4	**Str. Ens.**	String Ensemble 2
5	**LowSt&Harp**	Strings & Harp
6	**Pizz.Ens.**	Pizz. Strings
7	**ClassicEns**	Classical Orchestra
8	**WoodsQuart**	Wood Ensemble
9	**Flute&Harp**	Flute & Harp
10	**Fanfare**	Brass Ensemble 1
11	**BrassEns.**	Brass Ensemble 2
12	**PfClimax**	Piano Concerto
13	**Baroque**	Baroque 1
14	**Vl.Rococo**	Baroque 2
15	**Str. Quart**	String Quartet
16	**ChoirTutti**	Orchestra w/choir

Page 2: Twilight Illumination ~ Jazz Time

	LCD (Name)	Content
1	**Sax. Full**	Big Band Orchestra 1
2	**Full Brass**	Big Band Orchestra 2
3	**Mute Ens.**	Big Band Orchestra 3
4	**SolidTutti**	Big Band Orchestra 4
5	**Moon Light**	Big Band Orchestra 5
6	**Trb. Ens.**	Big Band Orchestra 6
7	**Quartet**	Quartet
8	**Cocktail**	Quintet
9	**BeBop**	Be Bop
10	**Afro'Jazz**	Afro Cuban
11	**Jazz Vl.**	Jazz Violin
12	**SwingWaltz**	Jazz Waltz
13	**Fast Combo**	Combo Jazz
14	**Dixie**	Dixieland Jazz
15	**RadioDays**	Ragtime
16	**Charleston**	Charleston

Page 3: Latin

	LCD (Name)	Content
1	**SambaBrass**	Samba 1
2	**SambaLight**	Samba 2
3	**BossaCombo**	Bossanova 1
4	**BossaStr.**	Bossanova 2
5	**MamboSlow**	Mambo 1
6	**MamboFast**	Mambo 2
7	**Rhumba**	Rhumba
8	**Beguine**	Beguine
9	**Cha - Cha**	Cha - Cha
10	**Salsa**	Salsa
11	**TangoArgen**	Tango 1
12	**TangoConti**	Tango 2
13	**Mexican**	Mexican 1
14	**Viva!Bamba**	Mexican 2
15	**Jamaican16**	Caribbean 1
16	**Jamaican12**	Caribbean 2

Page 4: Dance & Fusion

	LCD (Name)	Content
1	**Disco**	70's Disco
2	**DancePop**	80's Dance
3	**Euro Beat**	Euro Beat
4	**WorldCup**	Latin Beat
5	**Funk**	Funk
6	**DanceClass**	Dance Classic
7	**R&R**	Oldies 1
8	**Twist**	Oldies 2
9	**Bounce**	16 Beat Shuffle
10	**BritePiano**	16 Beat 1
11	**Sax.&Synth**	16 Beat 2
12	**JazzFusion**	Jazz Fusion
13	**OceanGtr.**	West coast 1
14	**16Bt.Pf**	West coast 2
15	**16Bt.Balad**	16 Beat Ballad
16	**16Bt.Latin**	16 Beat Latin

Page 5: Black & White ~ Organ Sounds

	LCD (Name)	Content
1	**Straight**	Flute Combi. 1
2	**Cluster**	Flute Combi. 2
3	**Dry Combi**	Flute Combi. 3
4	**Fat &Rich**	Flute Combi. 4
5	**Moody**	Jazz Ballad 1
6	**Full Balad**	Jazz Ballad 2
7	**LightCombi**	Organ Bossa 1
8	**OrganCla.**	Organ Bossa 2
9	**WhiteShade**	8 Beat Ballad 1
10	**Pale Great**	8 Beat Ballad 2
11	**MetalCombi**	Rock Organ 1
12	**Blues**	Rock Organ 2
13	**Cathedral**	Cathedral
14	**Chapel**	Chapel
15	**Carousel**	Carousel
16	**Stadium**	Stadium

Voice Category List

A variety of voices can be divided into the following categories.

ORCHESTRAL

The voice names in a square indicate they are created by VA (Virtual Acoustic) synthesis.

- Strings 1
  - Strings 2
    - Strings 3
      - Strings 4
    - Strings 5
      - Strings 6
    - Strings 7
    - Synth Strings 1
      - Synth Strings 2
      - Synth Strings 3
  - Strings 8
  - Tremolo Strings
  - Pizzicato Strings
- Brass 1
  - Brass 2
  - Brass 3
    - Brass 4
    - Brass 5
  - Synth Brass 1
    - Synth Brass 2
      - Synth Brass 3
      - Synth Brass 4
    - [Saw Lead]
- Clarinet 1
  - Clarinet 2
  - Clarinet 3
  - Bass Clarinet 1
  - Synth Clarinet 1
    - Synth Clarinet 2
    - [Soft Reed]
  - [V-Clarinet]
- Saxophone 1
  - Saxophone 2
    - [Tenor Sax]
    - [Breath Sax]
  - Sax Ensemble 1
    - Sax Ensemble 2
  - Soprano Sax
    - Synth Sax
      - Synth Lead 1
        - Synth Lead 6
        - Synth Lead 7
      - Synth Lead 2
      - Synth Lead 3
      - Synth Lead 4
      - Synth Lead 5
    - [V-Soprano Sax]
  - [Alto Sax]
- Chorus 1
  - Chorus 2
    - Chorus 3
      - Chorus 4
      - Chorus 6
      - Chorus 7
  - Vocal
  - Chorus 5
  - Chorus 8
- Organ 1
  - Organ 2
  - Organ 3
  - Theatre Organ 1
    - Theatre Organ 2
  - Pop Organ 1
    - Pop Organ 2
  - Jazz Organ 1
    - Jazz Organ 2
    - Jazz Organ 3
    - Jazz Organ 4
  - Accordion
    - Organ 4
    - Bandoneon
- Piano 1
  - Piano 2
  - Honky Tonk Piano
  - Electric Piano 1
    - Electric Piano 2
    - Electric Piano 3
    - Electric Piano 4
    - Clavi.
  - Harpsichord
  - Clavichord
- Guitar 1
  - Guitar 2
    - Guitar 3
    - [Jazz Guitar]
  - 12Str. Guitar
  - Electric Guitar 1
    - Electric Guitar 2
    - Steel Guitar
    - Distorted Guitar
      - [Distorted Lead]
    - Muted Guitar
      - [Picked Guitar]
  - Mandolin
    - Taisho-koto
      - Sitar
        - [V-Sitar]
  - Banjo
    - Shamisen
  - Harp
    - Koto
- Vibraphone
  - Glockenspiel
    - Celesta
      - Music Box
  - Marimba
    - Xylophone
  - Chime
  - Synth Chime
  - Steel Drum
- Cosmic 1
  - Cosmic 11
  - Cosmic 13
  - [Custom 4]
- Cosmic 2
  - Cosmic 12
  - Cosmic 14
  - [Custom 3]
- Cosmic 3
  - Cosmic 10
  - Cosmic 15
  - Cosmic 16
- Cosmic 4
  - [Custom 6]
- Cosmic 5
- Cosmic 6
  - [Custom 1]
- Cosmic 7
  - [Custom 5]
- Cosmic 8
  - [Talken Lead]
  - [Custom 2]
- Cosmic 9

ORCHESTRAL

The voice names in a square indicate they are created by VA (Virtual Acoustic) synthesis.

- Tutti 1
  - Tutti 2
    - Tutti 7
      - Tutti 8
  - Tutti 3
  - Tutti 4
    - Tutti 5
    - Tutti 6
      - Tutti 10
  - Tutti 9
- Harmonica 1
  - Harmonica 2
    - Muted Lead
  - Thin Reed
- Horn 1
  - Horn 2
  - Horn 3
  - Horn 4
  - Muted Horn

LEAD

- Violin 1
  - Violin 2
    - Violin 3
      - Bow Strings
  - Violin 4
  - Violin 5
  - Buzz String
  - Pizzicato Violin
  - Cello
  - Kokyu
    - V-Kokyu
- Flute 1
  - Flute 2
    - Shakuhachi
      - V-Shakuhachi
    - Flute 4
  - Flute 3
  - Recorder
    - Pan Flute
      - Ocarina
      - Pan Pipe
      - Woody Lead
    - Air Reed
  - Whistle
    - Piccolo
      - Yokobue
  - V-Flute
- Oboe 1
  - Oboe 2
    - Grass Reed
    - Oboe 4
  - Oboe 3
  - English Horn 1
    - English Horn 2
  - Bassoon 1
    - Bassoon 2
    - Bassoon 3
  - V-Oboe
- Trumpet 1
  - Trumpet 2
    - Trumpet 4
      - Trumpet 6
    - Flugelhorn
      - Euphonium
  - Trumpet 3
  - Muted Trumpet
    - Trumpet 5
    - Waspy Horn
  - Trombone 1
    - Trombone 2
    - Trombone 3
    - Muted Trombone
    - V-Trombone
  - V-Trumpet

BASS

- Contrabass 1
  - Contrabass 2
  - Contrabass 3
  - Pizzicato Bass
    - Upright Bass
- Electric Bass 1
  - Electric Bass 2
    - Electric Bass 5
  - Electric Bass 3
  - Electric Bass 4
  - Synth Bass 1
    - Synth Bass 2
      - Synth Bass 3
        - Edge Lead
        - Synth Bass 4
    - Synth Bass 5
- Organ Bass 1
  - Organ Bass 2
    - Organ Bass 4
  - Organ Bass 3
- Tuba
  - Timpani 1
    - Timpani 2
    - Timpani Roll

The Preset Voices for Upper/Lower Flute Voices

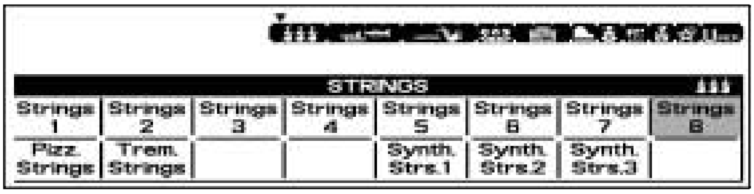
Jazz Organ 1	Jazz Organ 2	Jazz Organ 3	Jazz Organ 4
Pop Organ 1	Pop Organ 2	Pop Organ 3	Pop Organ 4

2 New Voices

23 new AWM+FM voices are added: from 173 voices to 196 voices with EL-900m.
23 new additional voices allow you to play a variety of music categories, from classicals to contemporary music.
The total number of voices has become 230; 196 AWM+FM voices and 34 VA voices.

Let's take a brief look at the newly added voices.

Strings Page



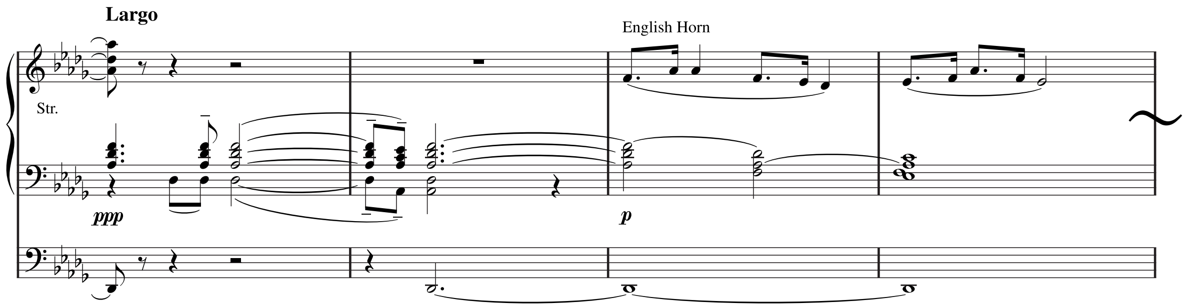
● Strings 8 (8')

Con sordino (with mute) strings. Reproduces softly played string sounds.
Subtle nuance can be produced by playing touch.

NOTE:

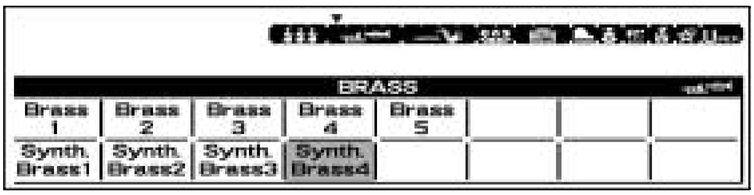
Refer to Voice Category List.

A. Dvorak: From the New world, 2nd Movement



If you play it on EL-900, String 1 is produced.

Brass Page

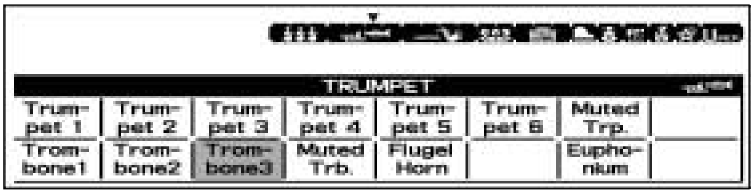


● Synth.Brass4(8')

Full-bodied synth. Brass sound with unique pitch characteristics.

If you play it on EL-900, Shynth Brass2 is produced.
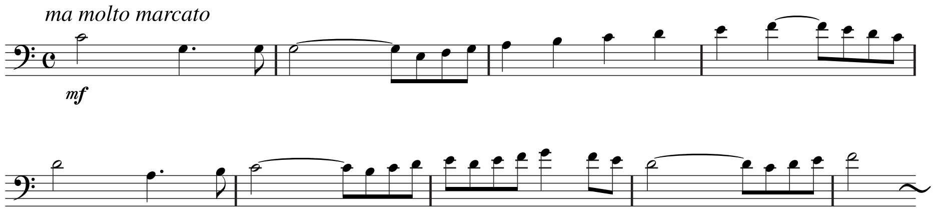
Trumpet Page



● Trombone3(UK16'/LK8')

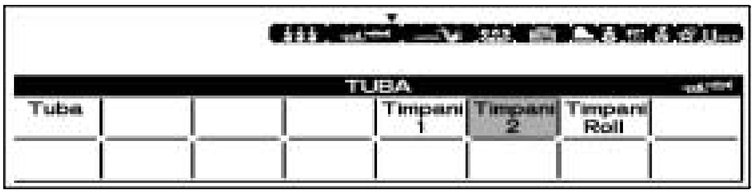
Trombone with the characteristics having strong and resonant tone.

R. Wagner: Die Meistersinger von Nurnberg, Vorspiel 1 Aufzug



If you play it on EL-900, Trombone 1 is produced.

Tuba Page



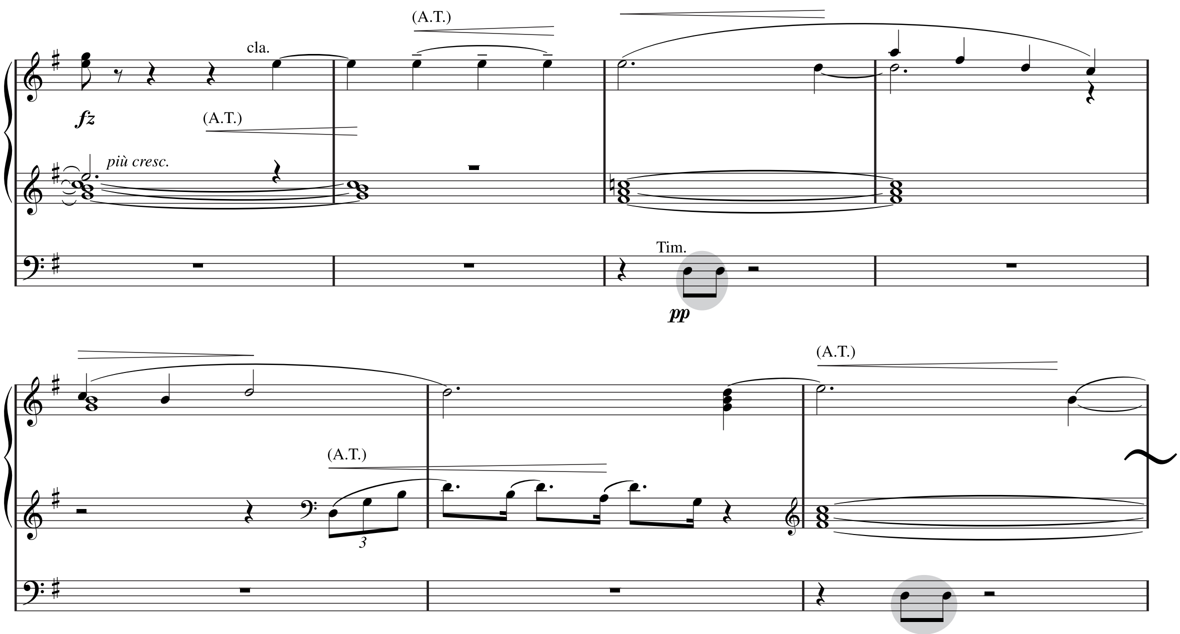
NOTE:

Although some of the voice names and the locations of those on EL-900 may be altered because of accommodating new voices, they will not affect data compatibility between EL-900m and other models.

● Timpani 2(8')

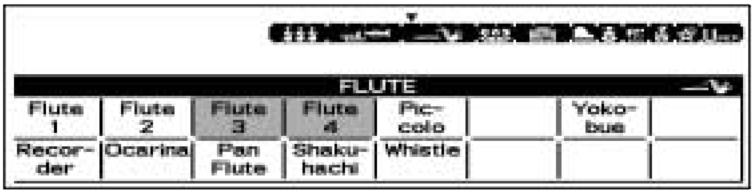
Expressive Timpani sounds played with softer mallets. Responsive to your touch so that it can express strength from Piano to Forte. Good for classicals.

A. Dvorak: From the New world, 4th Movement
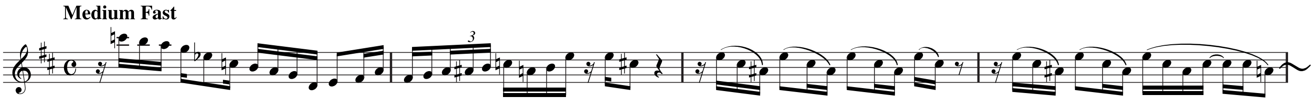


If you play it on EL-900, Timpani 1 is produced.

Flute Page



● Flute3(8')

Jazz flute with unique attack. Suitable for both faster phrases and extended ones. Vibrato is preset and fixed to the voice.

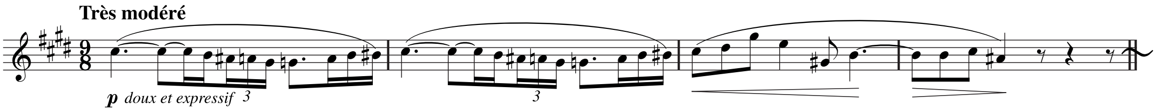


If you play it on EL-900, Flute 1 is produced.

● Flute4(8')

Classical flute with deep vibrato. Vibrato is preset and fixed to the voice.

C. A. Debussy: Prelude a l'apres-midi d'un faune



If you play it on EL-900, Flute 2 is produced.

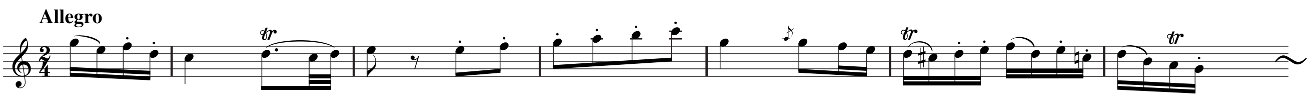
Oboe Page



● Oboe 3(8')

Oboe suited to faster phrases. Vibrato is preset and fixed to the voice.

W. A. Mozart: From Konzert fur Oboe und Orchester

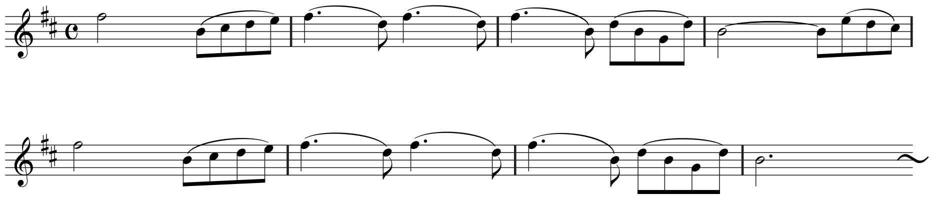


If you play it on EL-900, Oboe 1 is produced.

● Oboe 4(8')

Expressive oboe for classicals.

P. I. Tchaikovsky: The Swan Lake

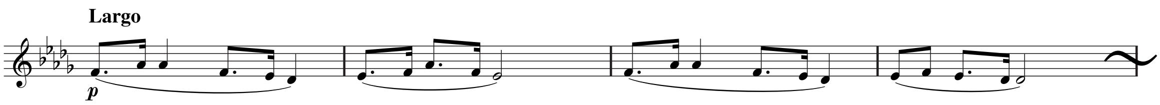


If you play it on EL-900, Oboe 2 is produced.

● English Horn2(8')

English horn with distinctive reed.

A. Dvorak: From the New world, 2nd Movement



If you play it on EL-900, English Horn1 is produced.

● Bassoon3(UK16'/LK8')

Bassoon with rich resonance even in the lower register.

If you play it on EL-900, Bassoon 1 is produced.
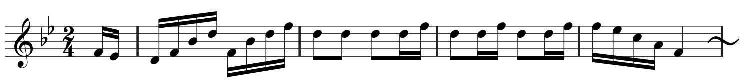
Clarinet Page



● Clarinet 3(8')

Sweet and expressive clarinet.

Clarinet Polka



If you play it on EL-900, Clarinet 1 is produced.

Saxophone Page



● Synth. Lead6(8')

Comical synth. Lead with unique pitch characteristics.

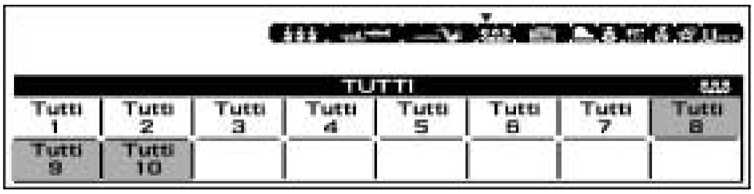
If you play it on EL-900, Synth. Lead 1 is produced.

● Synth. Lead7(8')

Synth. Lead having Synth bass image.

If you play it on EL-900, Shynth Lead 1 is produced.

Tutti Page
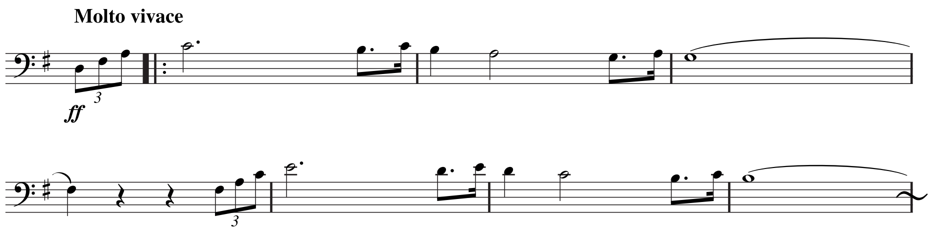


NOTE:

Tutti, as you know, contains various types of voices. Especially, you should be conscious with the voice range when you play in the lowest/highest registers.

● Tutti 8(8')

Gorgeous brass ensemble.

R. Wagner: From Lohengrin

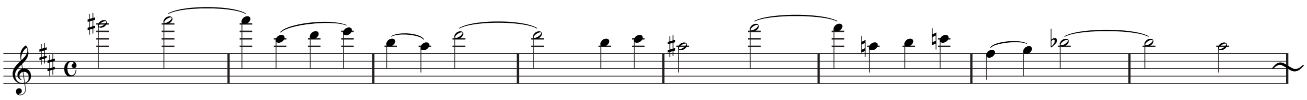


If you play it on EL-900, Tutti 7 is produced.

● Tutti 9(8')

Magnificent string ensemble. Rich expressiveness with touch.

P. I. Tchaikovsky: Romeo and Juliet



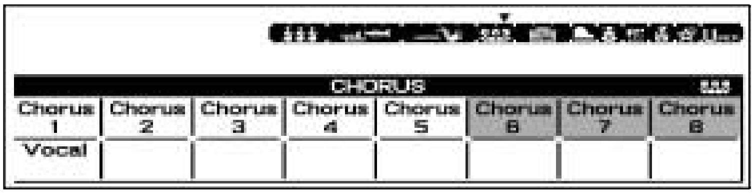
If you play it on EL-900, Tutti 1 is produced.

● Tutti 10(8')

Wood winds ensemble. Thicker than Tutti 6. Also, it is attractive when mixed with other voices.

If you play it on EL-900, Tutti 6 is produced.

Chorus Page



● Chorus 6(8')

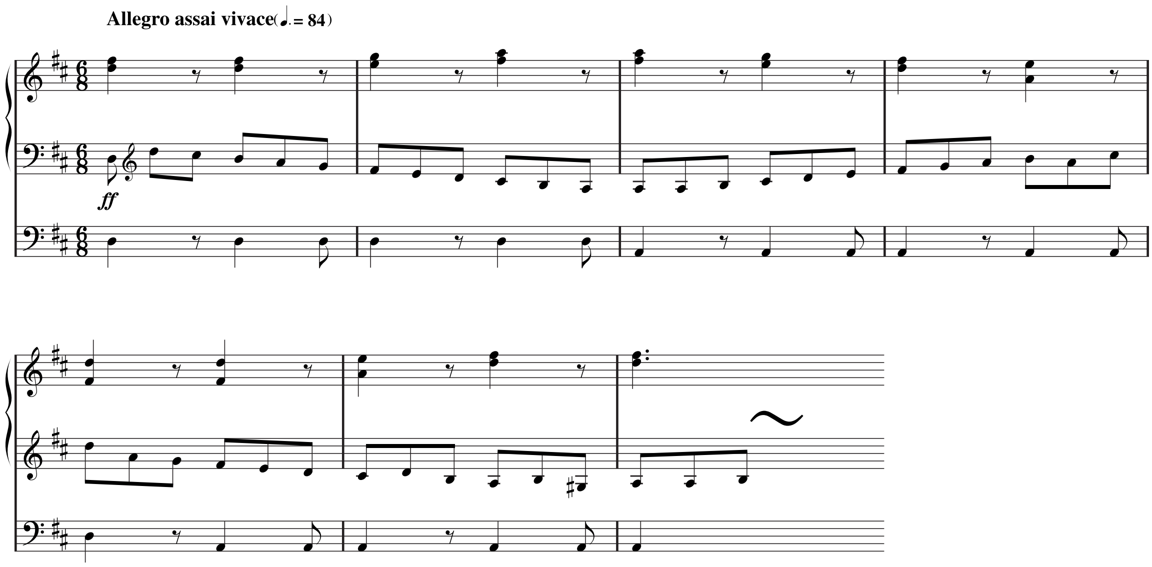
Mixed chorus for the sacred music. Having a slow and clean impression, especially suited to chorale.

If you play it on EL-900, Chorus 3 is produced.

● Chorus 7(8')

Impressive chorus.

L. V. Beethoven: From Symphonie No. 9 "Choral"



If you play it on EL-900, Chorus 3 is produced.

● Chorus 8(8')

Chorus for Gospel music.

If you play it on EL-900, Chorus 1 is produced.

NOTE:

Let's play the following score using the registration, "Choir Tutti" in the category of Symphonic Orchestra (page 1, Registration Menu Disk).
See page 9 for more information on Registration Menu Disk.

Piano Page



● Elec. Piano4(8')

Bright and brilliant electric piano.

If you play it on EL-900, Elec. Piano 1 is produced.

Electric Bass Page



● Elec. Bass 5(16')

Expressive Electric bass.

If you play it on EL-900, Elec. Bass 2 is produced.

● Syn. Bass 4(16')

Resonant synth. bass.

If you play it on EL-900, Synth. Bass 3 is produced.

● Synth. Bass 5(16')

Synth. Bass suitable for playing gradually changing sounds.

If you play it on EL-900, Synth. Bass 1 is produced.

The following list summarizes the newly added voices. Refer to the Details on Each Voice at the end of this manual for the information on the other voices.

New Voices

Page	Voice Name	Feet	Effect	Comment
STRINGS	Strings 8	8'	-	Con sordino (with mute) strings.Reproduces softly played string sounds.
BRASS	Synth. Brass 4	8'	-	Full-bodied synth. Brass sound with unique pitch characteristics.
TRUMPET	Trombone 3	U16'/L8'	-	Trombone with the characteristics having strong and resonant tone.
TUBA	Timpani 2	8'	-	Expressive Timpani sounds played with softer mallets.
FLUTE	Flute 3	8'	-	Jazz flute with unique attack.
	Flute 4	8'	-	Classical flute with deep vibrato.
OBOE	Oboe 3	8'	-	Oboe suited to faster phrases.
	Oboe 4	8'	-	Expressive oboe for classicals.
	English Horn 2	8'	-	English horn with distinctive reed.
	Bassoon 3	U16'/L8'	-	Bassoon with rich resonance even in the lower register.
CLARINET	Clarinet 3	8'	-	Sweet and expressive clarinet.
SAXOPHONE	Synth. Lead 6	8'	-	Comical synth. Lead with unique pitch characteristics.
	Synth. Lead 7	8'	-	Synth. Lead having Synth bass image.
TUTTI	Tutti 8	8'	-	Gorgeous brass ensemble.
	Tutti 9	8'	-	Magnificent string ensemble.Rich expressiveness with touch.
	Tutti 10	8'	-	Wood winds ensemble.Thicker than Tutti 6.
CHORUS	Chorus 6	8'	-	Mixed chorus for the sacred music.
	Chorus 7	8'	-	Impressive chorus.
	Chorus 8	8'	-	Chorus for Gospel music.
PIANO	Elec. Piano 4	8'	-	Bright and brilliant electric piano.
ELECTRIC BASS	Elec. Bass 5	16'	-	Expressive Electric bass.
	Synth. Bass 4	16'	-	Resonant synth. bass.
	Synth. Bass 5	16'	-	Synth. Bass suitable for playing gradually changing sounds.

Voice Menu

The following chart lists the voices available and their button/page assignment.

STRINGS Upper/Lower

STRINGS							
Strings 1	Strings 2	Strings 3	Strings 4	Strings 5	Strings 6	Strings 7	Strings 8
Pizz. Strings	Trem. Strings			Synth. Strs.1	Synth. Strs.2	Synth. Strs.3	

CLARINET Upper/Lower

CLARINET							
Clari-net 1	Clari-net 2	Clari-net 3		Bass Cla.			
Synth. Cla.1	Synth. Cla.2						

VIOLIN Lead

VIOLIN							
Violin 1	Violin 2	Violin 3	Violin 4	Violin 5	Pizz. Violin		
Cello	Kokyu						

SAXOPHONE Upper/Lower

SAXOPHONE							
Saxo-phone1	Saxo-phone2	Sopra. Sax.	Sax. Ens.1	Sax. Ens.2	Synth. Sax		
Synth. Lead1	Synth. Lead2	Synth. Lead3	Synth. Lead4	Synth. Lead5	Synth. Lead6	Synth. Lead7	

CONTRABASS Pedal

CONTRABASS							
Contra Bass 1	Contra Bass 2	Contra Bass 3		Pizz. Bass	Upright Bass		

TUTTI Upper/Lower

TUTTI							
Tutti 1	Tutti 2	Tutti 3	Tutti 4	Tutti 5	Tutti 6	Tutti 7	Tutti 8
Tutti 9	Tutti 10						

BRASS Upper/Lower

BRASS							
Brass 1	Brass 2	Brass 3	Brass 4	Brass 5			
Synth. Brass 1	Synth. Brass 2	Synth. Brass 3	Synth. Brass 4				

CHORUS Upper/Lower

CHORUS							
Chorus 1	Chorus 2	Chorus 3	Chorus 4	Chorus 5	Chorus 6	Chorus 7	Chorus 8
Vocal							

HORN Lower

HORN							
Horn 1	Horn 2	Horn 3	Horn 4	Muted Horn			

HARMONICA Upper

HARMONICA							
Harmo-nica1	Harmo-nica2						

TRUMPET Lead

TRUMPET							
Trum-pet 1	Trum-pet 2	Trum-pet 3	Trum-pet 4	Trum-pet 5	Trum-pet 6	Muted Trp.	
Trom-bone1	Trom-bone2	Trom-bone3	Muted Trb.	Flugel Horn		Eupho-nium	

ORGAN Upper/Lower

ORGAN							
Organ 1	Organ 2	Organ 3	Organ 4	Jazz Organ 1	Jazz Organ 2	Jazz Organ 3	Jazz Organ 4
Pop Organ 1	Pop Organ 2	Theat. Organ 1	Theat. Organ 2	Accor-dion	Bando-neon		

TUBA Pedal

TUBA							
Tuba				Timpani 1	Timpani 2	Timpani Roll	

ORGAN BASS Pedal

ORGAN BASS							
Organ Bass 1	Organ Bass 2	Organ Bass 3	Organ Bass 4				

FLUTE Lead

FLUTE							
Flute 1	Flute 2	Flute 3	Flute 4	Pic-colo		Yoko-bue	
Recor-der	Ocarina	Pan Flute	Shaku-hachi	Whistle			

PIANO Upper/Lower

PIANO							
Piano 1	Piano 2	Honky Tonk		Elec. Piano 1	Elec. Piano 2	Elec. Piano 3	Elec. Piano 4
Harpsi -chord		Clavi.	Clavi-chord				

OBOE Lead

OBOE							
Oboe 1	Oboe 2	Oboe 3	Oboe 4	English Horn1	English Horn2		
Bas-soon1	Bas-soon2	Bas-soon3					

GUITAR Upper/Lower

GUITAR							
Guitar 1	Guitar 2	Guitar 3	12Str. Guitar	Banjo	Mando-lin	Sitar	Shami-sen
Elec. Guitar1	Elec. Guitar2	Muted Guitar	Dist. Guitar	Harp	Steel Guitar	koto	Taisho koto



VIBRAPHONE Upper/Lower

VIBRAPHONE							
Vibraphone	Glocken.	Celesta	Music Box	Marimba	Xylophone		
Chime	Synth. Chime			Steel Drum			

ELECTRIC BASS Pedal

ELECTRIC BASS							
Elec. Bass1	Elec. Bass 2	Elec. Bass 3	Elec. Bass 4	Elec. Bass 5			
Synth. Bass1	Synth. Bass 2	Synth. Bass 3	Synth. Bass 4	Synth. Bass 5			

COSMIC Upper/Lower

COSMIC							
Cosmic 1	Cosmic 2	Cosmic 3	Cosmic 4	Cosmic 5	Cosmic 6	Cosmic 7	Cosmic 8
Cosmic 9	Cosmic 10	Cosmic 11	Cosmic 12	Cosmic 13	Cosmic 14	Cosmic 15	Cosmic 16

USER VOICE

USER VOICE							
USER 1	USER 2	USER 3	USER 4	USER 5	USER 6	USER 7	USER 8
USER 9	USER 10	USER 11	USER 12	USER 13	USER 14	USER 15	USER 16

NOTE:

The VA voices of the Lead Voice 2 section are not comprised in the 22 Voice Menu pages.

LEAD VOICE 2(VA)

VA ACOUSTIC

VA ACOUSTIC							
Flute	Oboe	Clarinet		Sopra. Sax.	Alto Sax	Tenor Sax.	Breath Sax.
Trumpet	Trombone			Shakuhachi	Kokyu	Sitar	

VA VIRTUAL

VA VIRTUAL							
Pan Pipe				Air Reed	Thin Reed	Grass Reed	Soft Reed
Buzz String	Bow String			Waspy Horn			

VA ELECTRONIC

VA ELECTRONIC							
Jazz Guitar	Picked Guitar						
Saw Lead	Edge Lead	Dist. Lead	Woody Lead	Muted Lead	Talken Lead		

VA CUSTOM

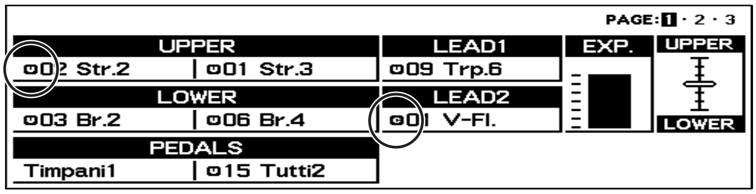
VA CUSTOM							
Custom 1	Custom 2	Custom 3	Custom 4	Custom 5	Custom 6		

* The details for each voices such as octave (feet) setting and effect on/off status are shown in the list on page 46.

3 Additional Changes on Voice Display Pages

Two pages are added to the Voice Display page, a page with useful indications for realtime performance, the other for master control functions over various parameters; the Voice Display has become configured with total three pages.

Voice Display, Page 1



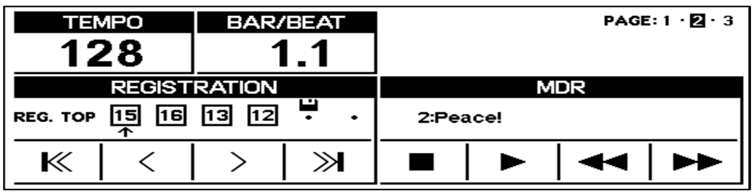
This first page is the same as the one in EL-900 excepting that: "U" in negative letter will be added to the top of the voice name indicating the current voice is a User voice, if you have selected one of the User voices. If the name of the User voice has been altered, its latest name will also be displayed.

NOTE:

"U" in negative letter is the prefix for the AWM+FM User voices, while "C" in negative letter is the one for the VA Custom voices.

Voice Display, Page 2

The indications assisting your realtime performance are prepared in this page. It's convenient for you to display this page when you play the Electone since you can visually confirm the functions related to realtime performance.



Tempo

Shows the current tempo, which is the same as the one on the Tempo LED in the Rhythm section. You don't need to look aside and confirm the tempo every time you want to check the current tempo in the middle of the performance.



Bar/Beat

As the name implies, this works as the bar and beat indicators. The difference from the existing Bar/Beat Indicator (LED in the Rhythm section) is that this indication is independent from the Tempo display and you will not miss every beat even when the tempo change occurs.
Also, you don't need to twist your head to see the current bar/beat.

● Bar/Beat indication when rhythm starts:



● Bar/Beat indication when rhythm is off:



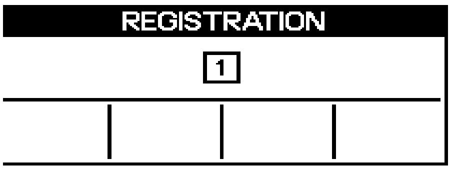
When you currently stop the rhythm, “STOP” is displayed.

● Bar/Beat indication when rhythm is in stand-by mode (Synchro. Start):



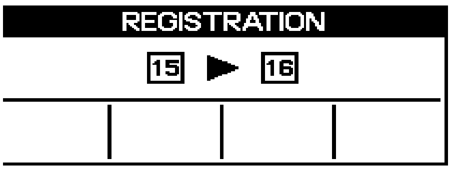
Registration Shift

● Registration Shift, off:



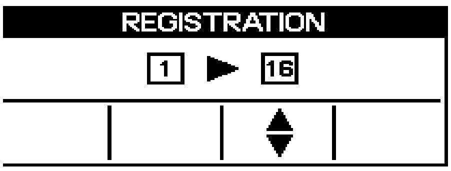
The current position/registration is displayed.

● Registration Shift, in "Shift" mode:



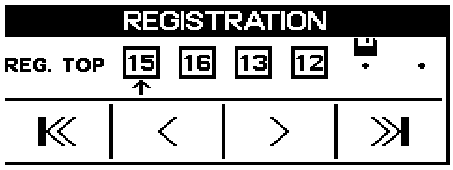
The current registration number (left) and the next number (right) will be displayed.

● Registration Shift, in "Jump" mode:



The current registration number (left) and the destination number (right) will be displayed. You can change the destination number even in the middle of the performance by pressing the appropriate Data Control buttons.

● **Registration Shift, in "User" mode:**

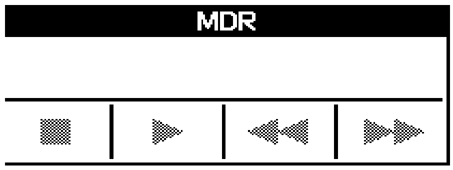


Indicates the current position of the Registration Shift. You can change the registration by moving the cursor to right and left. It's handy when you have wrongly advanced the shift setting in the middle of your performance. You cannot edit the user registration settings here.

M.D.R. Operation

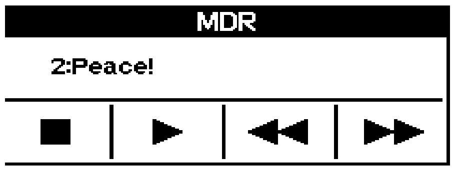
Start, Stop and Song Select operations on the M.D.R. can be executed here. The currently selected song number and its name will be displayed.
When you set the Next Song function, you can visually confirm if the next song has been read, or not.

● **M.D.R.: not displayed**



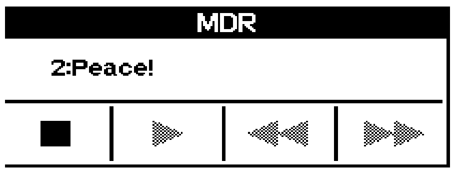
Nothing is displayed when no disk is inserted or while one of the following function is engaged: Recording, Song Delete, Song Copy and Disk Copy.
No Data Control button is operable, in this case.

● **M.D.R.: displaying the song name when stopped**



The number and name of the currently selected song are displayed.
Also, those of the XG songs are displayed.

● **M.D.R.: displaying the song name during playback**



Displayed during playback including song repeat function.
Only STOP button is available in this case.
When Next Song function is executed, the song number/name will be changed.

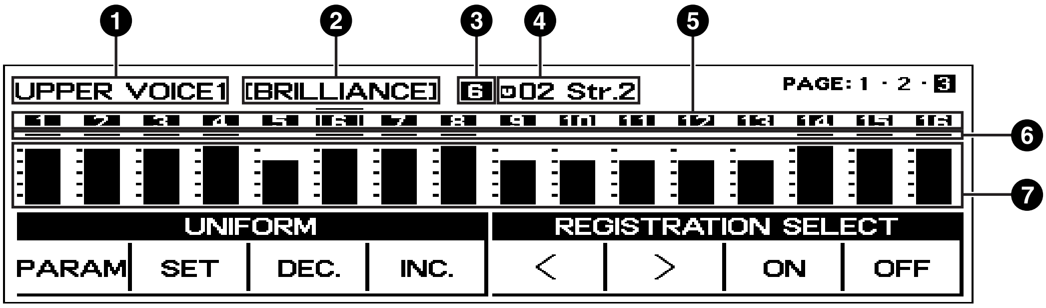
Voice Display, Page 3

You can adjust to "uniform" a specific parameter used in various voice group at one time.

Take Reverb here, for example, you may sometimes want to change Reverb depth of the entire system equally when you rehearse in a concert since each concert hall has its own environmental characteristics, or resonance. Although you know you can change the Reverb settings of the entire system at one time even on the EL-900, the EL-900m lets you do the same operation with various parameters.

Furthermore, you can select from the several changing methods: changing the specific parameter values in a certain registration to the value in another registration at one time or offsetting a certain amount of value from a certain parameter in a registration on the basis of the one in another registration.

● Let's check each section in the Voice Display.



❶ **Voice Group**
Shows the currently selected voice group.

❷ **Parameter**
Shows the current parameter.

❸ **Registration Memory Number**
Shows the currently selected Registration Memory number.

❹ **Voice Name**
Shows the voice name currently assigned to the displayed Voice Group.

❺ **Registration Memory (1 - 16)**
The cursor (box) is positioned at the currently selected Registration Memory number.
You can move the cursor to select another registration by pressing the Data Control buttons corresponding to the left/right arrows in REGISTRATION SELECT section.
Notice that you cannot move the cursor by directly pressing one of the Registration Memory buttons between the Upper and Lower keyboards.

❻ **Same Voice**
A line under each registration number indicates that the currently assigned voice to the registration is the same as the one shown at the top ❹.

❼ **Parameter Value**
Shows the values of the currently selected parameter ❷ to each registration.
Each value corresponds to the ones currently assigned to each voice group.

Basic Operation

❶ Select the desired parameter.→P.30

↓

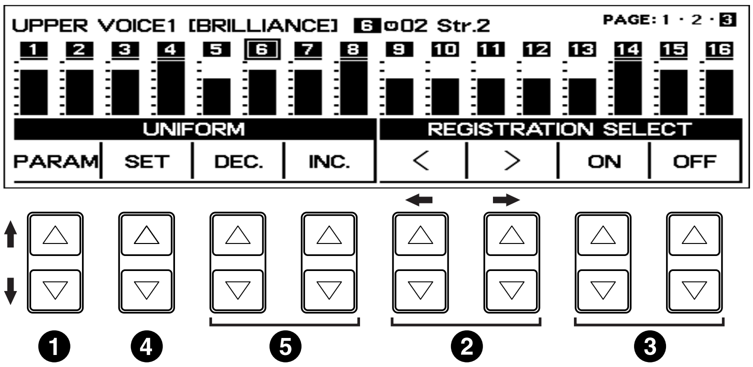
❷ Select the appropriate registration that contains the parameter value you want to use it as the master.→P.31
❸ Select the targeted registration numbers that contain the parameter value you want to change by turning on/off them.→P.31

↓ ↓

❹ Uniform the targeted parameter value(s) to that of the registration at the cursor position.→P.32

❺ Offset the targeted parameter value(s). →P.33

UNIFORM and REGISTRATION SELECT



❶ PARAM(Parameter)

Selects the parameter you want to change its amount.

Available parameters are as follows:
Each press of the down arrow Data Control button selects the parameters in order. Reverb Length is always selected when the Electone is turned on.

● Parameters

Related to Reverb settings:

Reverb Length
Reverb Depth
UK1 Reverb
UK2 Reverb
LK1 Reverb
LK2 Reverb
Lead1 Reverb
Lead2 Reverb
PK1 Reverb
PK2 Reverb
U.Flute Reverb
L.Flute Reverb
Percussion Reverb
Accompaniment Reverb

Related to Sustain settings:

UK Sustain
LK Sustain
PK Sustain

Related to Pan settings:

UK1 PAN
UK2 PAN
LK1 PAN
LK2 PAN
Lead1 PAN
Lead2 PAN
PK1 PAN
PK2 PAN

Related to Volume settings:

UK1 Volume
UK2 Volume
LK1 Volume
LK2 Volume
Lead1 Volume
Lead2 Volume
PK1 Volume
PK2 Volume
U.Flute Volume
L.Flute Volume
Percussion Volume
Accompaniment Volume

Related to Brilliance settings:

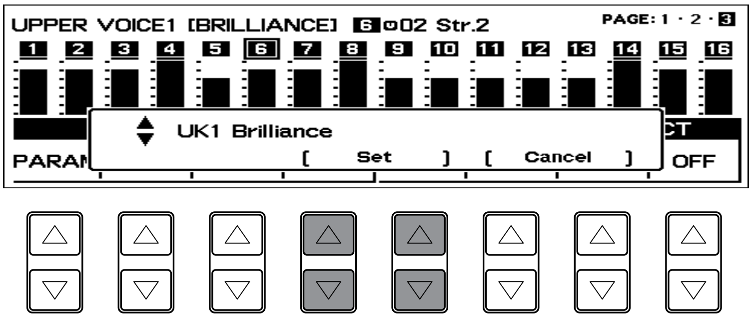
UK1 Brilliance
UK2 Brilliance
LK1 Brilliance
LK2 Brilliance
Lead1 Brilliance
Lead2 Brilliance
PK1 Brilliance
PK2 Brilliance

● Selecting the desired parameter

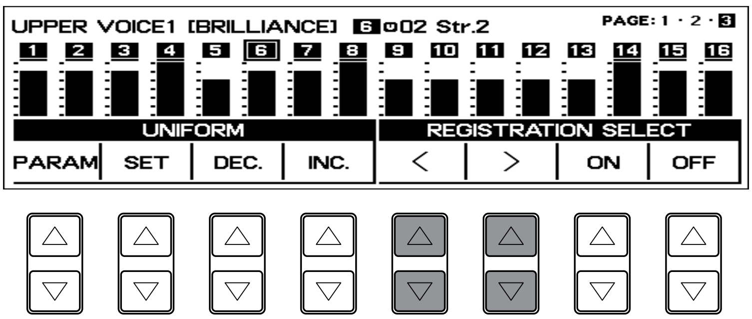
① **By pressing PARAM and the appropriate panel button simultaneously:**
You can directly select the parameter by pressing the panel button of the desired parameter while holding down the appropriate Data Control buttons corresponding to PARAM.

② **By pressing PARAM button:**
Press the appropriate Data Control buttons corresponding to PARAM and then release it. Parameter selection dialog box appears. Select the desired parameter using the appropriate Data Control buttons (left most) and select [Set] to execute the operation.

Parameter Selection Dialog Box

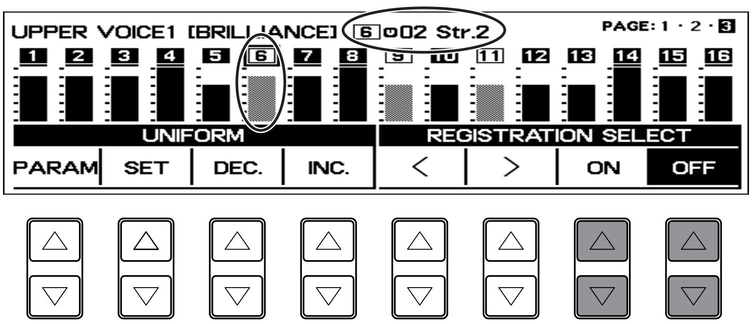


❷ Cursor (< >)
Selects the registration memory number you want to turn on/off or the number you want to set it as the master.



The registration memory number 6 is currently selected in this case.

❸ ON/OFF
Pressing "Off" after selecting the appropriate registration turns off (grayed out) its parameter. Pressing "On" turns on the parameter (solid bar). All parameters are selected after Power-On Reset operation.



There are several unique methods to select the registration memory numbers:

NOTE:
The parameters you can select using this method are:
- Volume
- Brilliance
- Reverb Depth
- Sustain

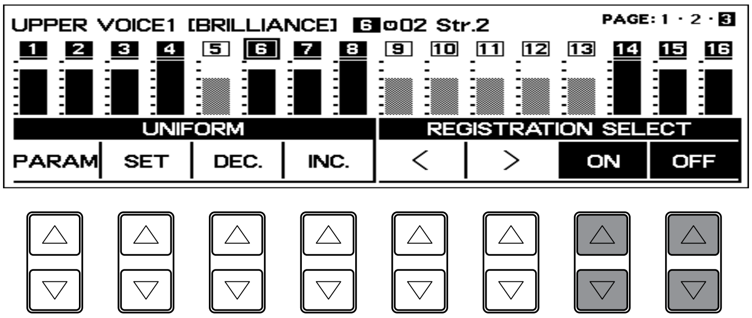
NOTE:
Pressing the appropriate Data Control buttons (left most) while holding down COARSE button selects the parameters in the same voice group.

NOTE:
The registration number encircled by the cursor (positive box) indicates that it acts as the master. Turning the Registration Select "switch" on and off to select the targeted registrations.

■ **By pressing ON button while holding down COARSE button:**
All the registration memory numbers can be selected by pressing the Data Control buttons corresponding to "ON" with the COARSE button held.

■ **By pressing OFF button while holding down COARSE button:**
All the registration memory numbers can be cancelled by pressing the Data Control buttons corresponding to "OFF" with the COARSE button held.

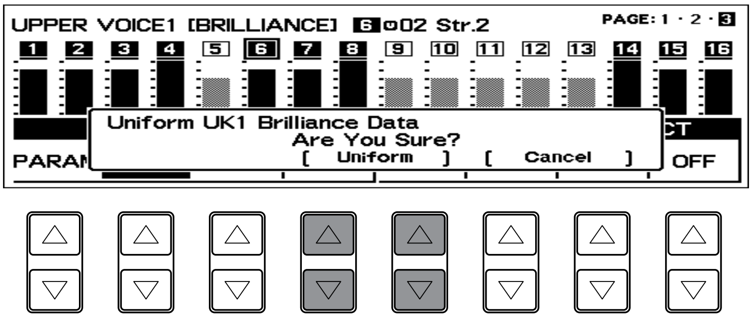
■ **By holding ON and OFF simultaneously:**
Holding down "ON" and "OFF" simultaneously turns on the registration memory numbers that contains the same voice as the one which is currently set in the registration at the cursor position.



In this case, the registrations 1, 2, 3, 4, 6, 7, 8, 14, 15 and 16 are shown in a solid bar indicating that those contain the User Voice 2, Str.2.

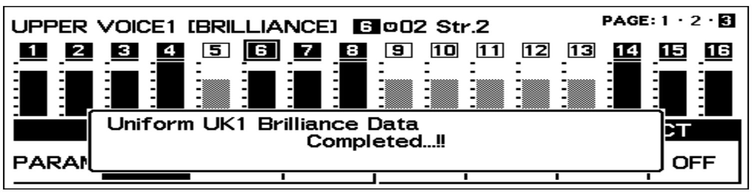
❹ **SET**
Uniforms the currently turned-on parameters' values to the one in the currently selected registration (at the cursor position).

Pressing [Set] opens the dialog box urging you to confirm the operation.



In this case, the operation uniforms the brilliance values of the Upper keyboard Voice in the registrations 1, 2, 3, 4, 6, 7, 8, 14, 15 and 16 to the one in the registration 6 (at the cursor position).

If you proceed the operation, select [Uniform].

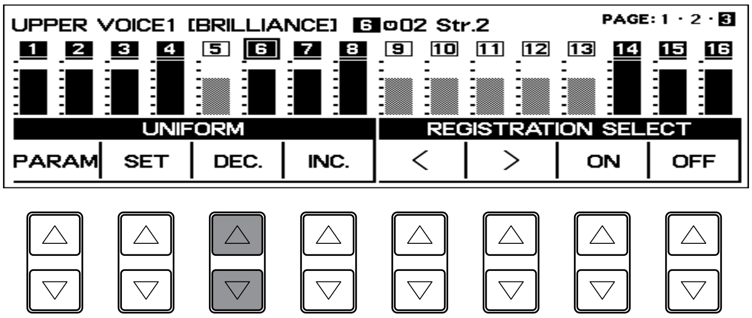


The completed message will momentarily be shown on the LCD.

❺ **DEC.(Decrement)/INC.(Increment)**

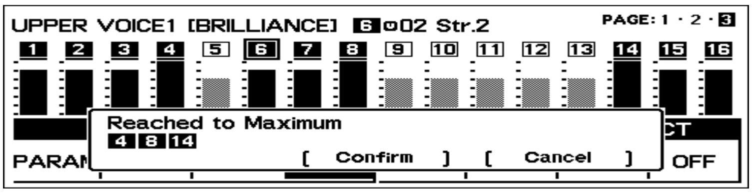
Offsets the currently turned-on parameters' values.

In the following case, you cannot increase the values the registrations 4, 8 and 14 relative to the one in the registration 6 since they are already set to maximum.



The following message appears, in this case. Also, you cannot exceed the minimum value when using decrement operation.

Alert Dialog Box



In this case, pressing [Confirm] continues the operation ignoring those with maximum value. Pressing [Cancel] aborts the operation.

NOTE:

You can decrement value by pressing any of the Data Control buttons just below DEC.

NOTE:

You can increment value by pressing any of the Data Control buttons just below INC.

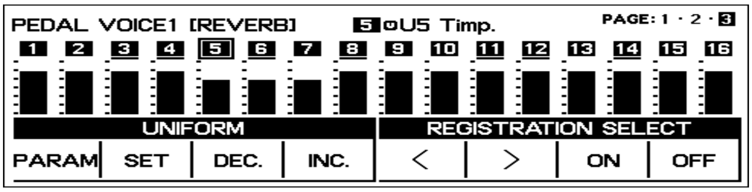
NOTE:

Be aware that you cannot retrieve the original data once the [Confirm] is engaged.

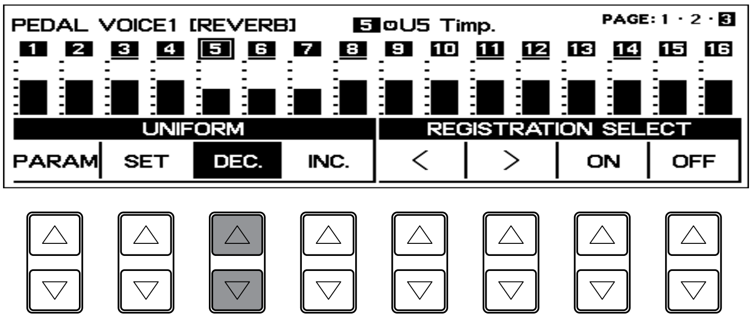
Setting Examples

The display shows differently depending on the selected parameter.

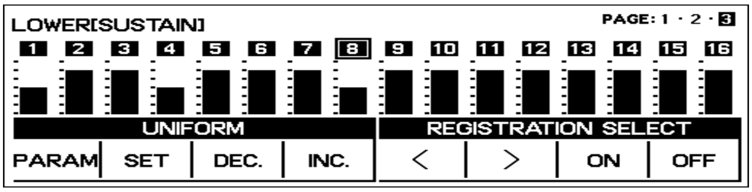
Reverb Parameter



Shows the Pedal Voice 1 Reverb parameters.
Imagine, you want to decrease the value equally from the all parameters.
Select all the parameters by pressing "On" while holding down COARSE. Press "DEC." button to gradually decrease the value.



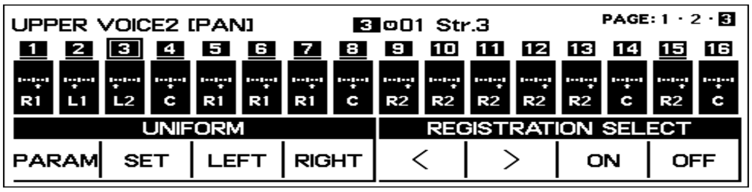
Sustain Parameter



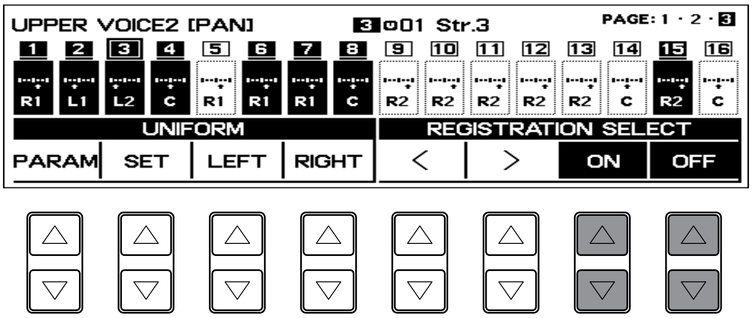
Shows the Lower Keyboard Voice Sustain parameters.

Try changes similar to the operation mentioned above.

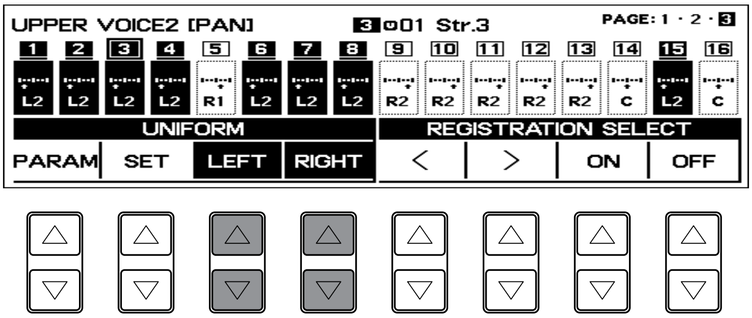
Panning Parameter



Shows the current panning of the Upper Keyboard Voice 2.
The cursor is currently set at the registration 3, User voice 1 is assigned and panning is set to L2.
You will find the same User voice 1 is assigned to the registrations 1, 2, 4, 6, 7, 8 and 15 but panning is different among those registrations.
To uniform the panning among those registrations, you need first to turn off the other registrations. Holding "On" and "Off" buttons simultaneously lets you select the voices containing the same voice. You are ready to uniform the pan setting.



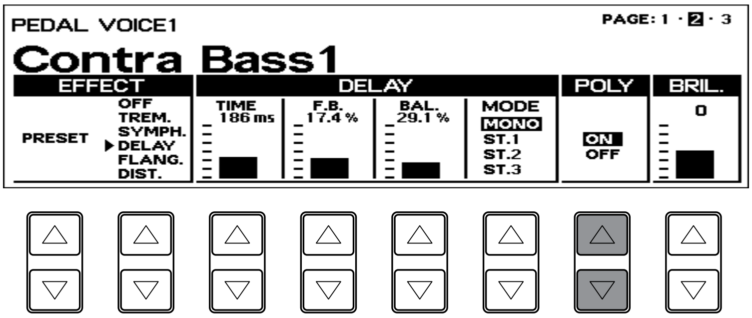
Lastly, press [Set] button to uniform the panning.
You will find the same pan setting, L2, is adopted to the registrations 1, 2, 4, 6, 7, 8 and 15.



You can offset the panning position using LEFT/RIGHT buttons (DEC./INC. are changed to LEFT/RIGHT in the case of panning).

4 Pedal Polyphonic Mode

You can change the monophonic pedal voices to be polyphonic.



This makes it possible for you to enjoy various playing styles.

NOTE:
Be aware that you cannot exceed the total maximum polyphony, 14 notes for both Upper, Lower and Pedal.

Legato and polyphonic play on the Pedalboard

You can make the different settings between Pedal Voice 1 and 2.

Pedal voices to the Lower keyboard

You can use one of the Pedal voices on the Lower keyboard using To Lower function.

Polyphonic Pedal voice and A.B.C. function

Set one of the Pedal Voice groups to Polyphonic mode and turn on the A.B.C. function. You can play the pedal voice independently and A.B.C. function produces sounds using the other Pedal Voice group.

NOTE:
A.B.C. function is not available with the Pedal Voice group which Polyphonic mode is set to on.

5 VA Voice Edit

Editing VA voices becomes possible with EL-900m.
The available parameters are the same as the ones on AWM.

NOTE:

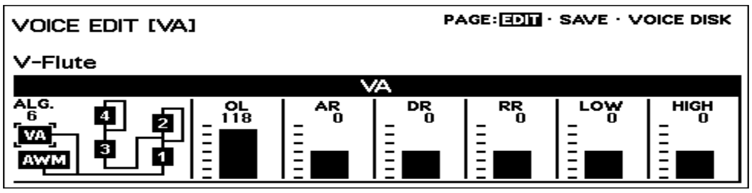
You need to understand the functions of each parameter to edit the VA voices.

- **OL (Output Level)**
  Determines the level of the VA sound.
  Range: 0 - 127
- **AR (Attack Rate)**
  Determines how quickly the Operator will reach its maximum level after the key is played. Lower values produce a slower attack.
  Range: -64 - +63
- **DR (Decay Rate)**
  Determines how much time it takes for the Operator to reach its second level.
  Range: -64 - +63
- **RR (Release Rate)**
  Determines how much time it takes for the level to reach 0 after the key is released.
  Range: -64 - +63
- **LOW**
  Determines to boost or decrease the output of the lower range of the keyboard.
  Range: -64 - +63
- **HIGH**
  Determines to boost or decrease the output of the higher range of the keyboard.
  Range: -64 - +63

The basic concept and necessary operations are the same as the ones for AWM voice editing.

NOTE:

Some voices may not have distinctive effect.



As you can see the algorithm, a VA voice is configured with three factors: VA, AWM and FM.

However, the output levels of AWM and FM tone generators are set to off, and VA voices sound using VA tone generator only. (This is true for all VA voices.)

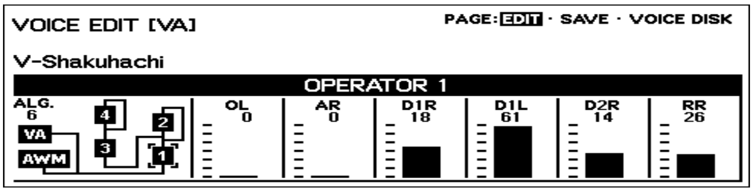
NOTE:

The VA voices built in EL-900 are also configured with VA, AWM and FM.

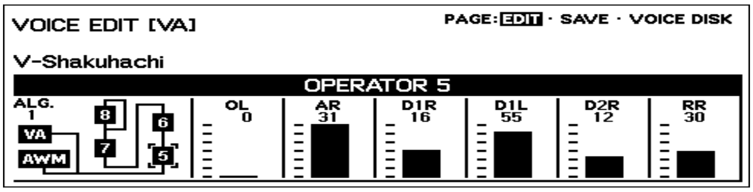
You can edit the VA voices adding AWM and/or FM voice elements. Now listen to the "hidden" voices by raising the AWM and/or FM output levels.

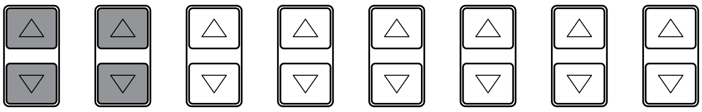
Let's check VA Shakuhachi voice.

1 Engage editing the voice.

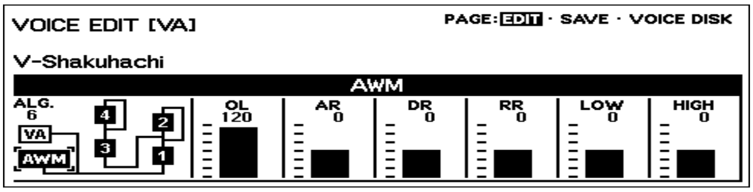


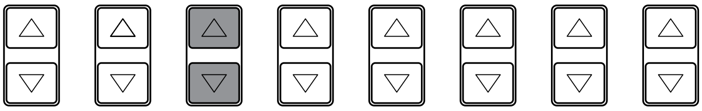
The OL of FM OP1, carrier, is set to 0.
Moves the cursor to OP5. The OL of FM OP5, carrier, is also set to 0.



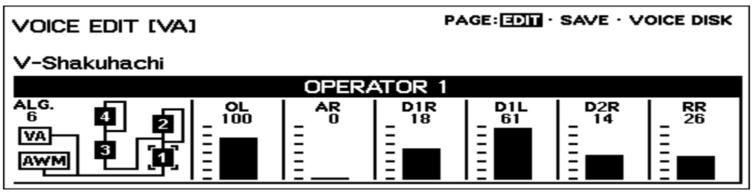


2 Move the cursor to AWM, and its OL is also set to 0. Gradually raise the OL of the AWM. In this case, turn off the VA tone generator (positive letters).





The voice, Shamisen, will gradually be heard.
You understand that Shamisen is preset as AWM voice.
Also, check the FM "hidden" voice by raising OL of FM carrier.
Turn off AWM and VA and listen to the FM voice. (VA and AWM should be displayed in positive letters.)



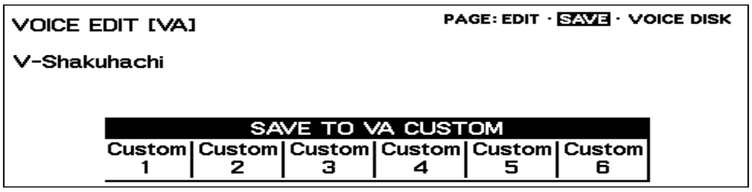
You will find an attack sound similar to Shamisen voice in the OP1 and OP5, carriers of FM synthesis.
Turn these FM carriers to off and turn the VA and AWM back to on.
(Be sure to lower the OL of FM OP1 and OP5 to the minimum.)

You can produce an effective voice using two voice factors, VA and AWM here for example, in a single voice.

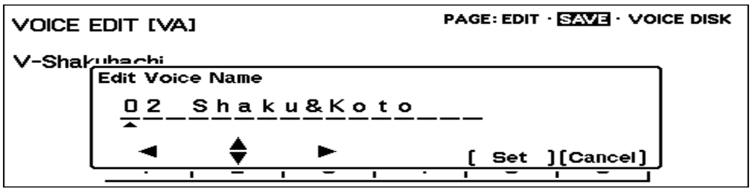
NOTE:

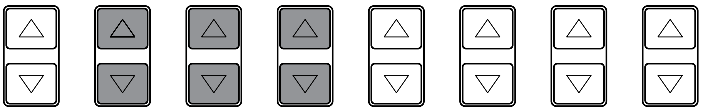
Turning each operator on/off: Move the cursor to select the appropriate operator using the second Data Control buttons from the left and temporarily turn off the operator using the left most Data Control buttons.

3 Save the voice to the Custom voice area.



Select SAVE page and save to the VA Custom Voice locations, different from the normal voices (User Voice).
You can name the voice you created as well as you do for the normal voices.
The operation and the number of letters for naming are the same as the one for normal voices.





Name the voice "02 Shaku&Koto" here.

VOICE NAME

Up to 16 letters can be used to name your newly created voice.
Yamaha recommends you to add the Custom (user) voice number to the voice you created. When displayed on the LCD or when reediting the voice, you may become unsure which user voice you are editing.

If you name a voice "Trumpet," the Voice Display simply shows it "(c) Trumpet." It will be difficult for you to know to which user number the voice is saved.

If you add the appropriate user number to the created voice, you can easily understand the voice's derivation.

Up to 6 user voice locations, Custom voices, are available for the VA voices.
All the Custom voice locations are tentatively preset with voices as factory preset. Those voices will be overwritten and cleared, when you save your own voices to the locations. If you want to keep a certain preset voice intact, select another location to save your voice.

NOTE:

Resetting the Custom (VA user) voices to the factory presets:
Power-On reset operation restores original voices. If you don't want to restore and you want to keep some of them with your voices, you can save the original voices to a disk in advance and reload the voice(s) one by one from it to Electone.

Reproducing the edited VA voices on EL-900

The edited VA voices can be reproduced on EL-900.
Although saving the registration again on EL-900 resets the voice parameters to 0, the voice itself is intact.
The voice name will also be reset. Be aware those facts when saving the registration again.

VOICE DISK

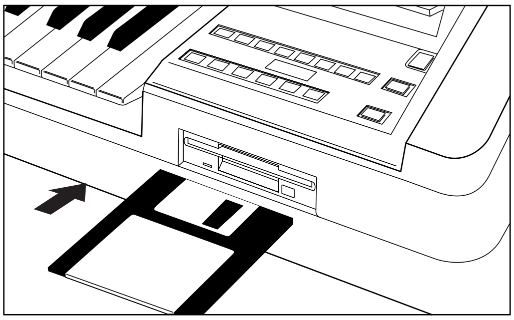
VA voice disk is optionally available.
The operation procedure is the same as the one for normal voices.

1 Select a VA voice and enter voice editing.

2 Select VOICE DISK using Page buttons.



3 Insert a VA voice disk.



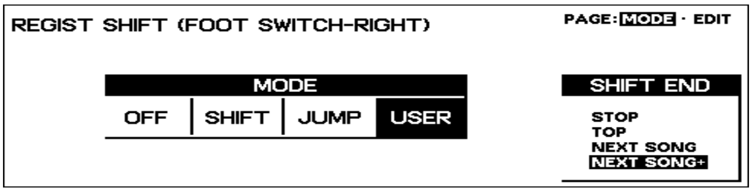
4 Select the desired voice by pressing Data Control buttons.

5 Designate one of the VA Custom voices and save the voice.

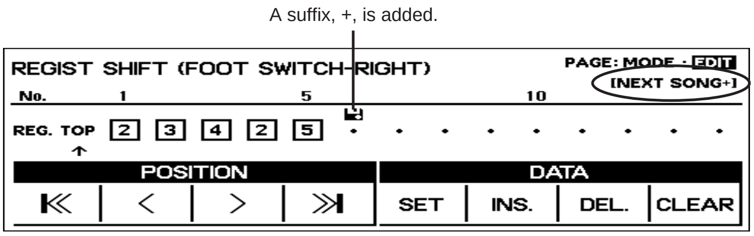
6 Registration Shift Next Song +

Different from EL-900, the user voices can also be read in the Next Song operation with EL-900m (Next Song +).
You can use the user voices more than 16.

Registration Shift: Mode Page



Registration Shift: User Edit



> **IMPORTANT**
> - Use the same user voice number and name for the same voices between songs.
> - If a voice with a specific user number is used in the previous song and another voice with the same user number is used in the next, always change one of the two voice names.

NOTE:

If you set the same user voices the user voices will not sound again in the consecutive song.
The sound will be played again in the transition to the next song, if the voice has two different names even when the same voice is used.

If you play the songs with EL-900, the new user voices will not be read.
You need to be aware what type of Electones you are using to make registration sequences.

NOTE:

The VA voices can also be read as well as the normal voices, but they may not sound since they take much time to be read in the Electone.

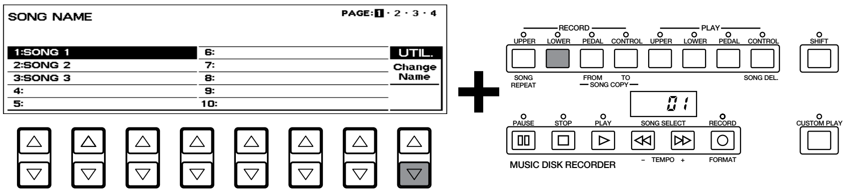
Disk Copy 2

The functions are almost the same as the ones on the EL-900. Additional operation method is added to the Disk Copy function.

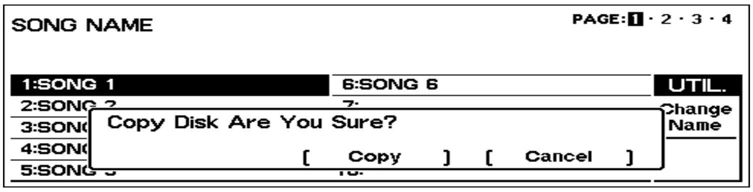
- Song Copy in the same disk (the same)
- Song Copy between different disks (the same)
- Disk Copy (new operation method is added)

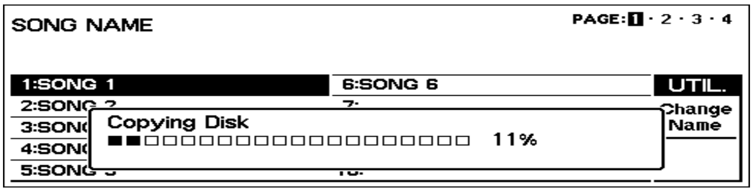
You can use the following operation procedure in Disk Copy function.

1. Insert the source disk into the disk slot. Simultaneously hold down the bottom right Data Control button and LOWER in the Record section in M.D.R.



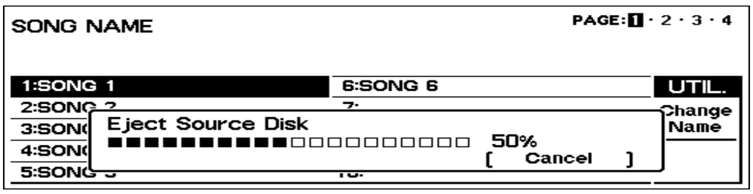
2. Press the Data Control buttons corresponding to [Copy] to initiate copy operation.



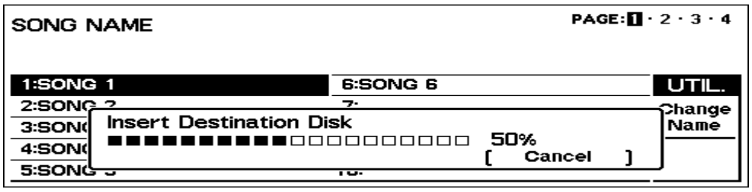


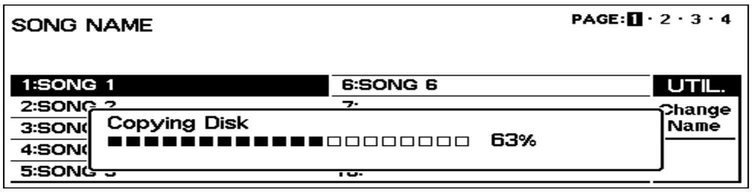
In the middle, 50%, the copying operation is finished.

3. Eject the source disk from the disk slot.

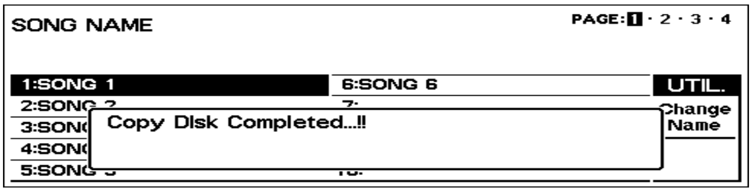


4 Insert the destination disk into the disk slot.



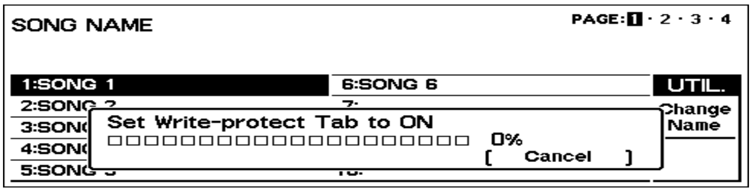


The bar indication, 100 %, indicates the copy (paste) operation is complete.



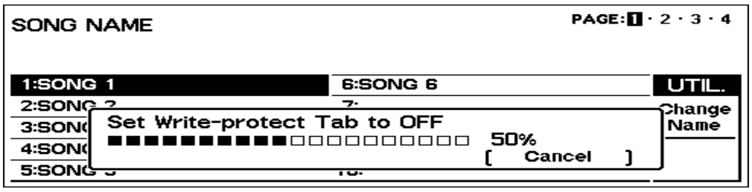
Error Messages

● Write-protect is off with the source disk in disk copy operation.



Answer: Set the disk's Write-protect tab to on.

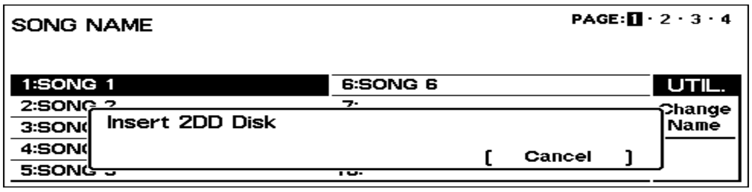
● Write-protect is on with the destination disk in disk copy operation.



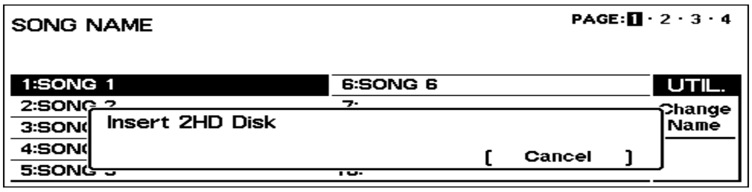
Answer: Set the Write-protect tab to off.

● Different disks in the disk copy operation.

(Ex: 2HD disk is inserted as the copy destination while 2DD disk data has been read as the source.)

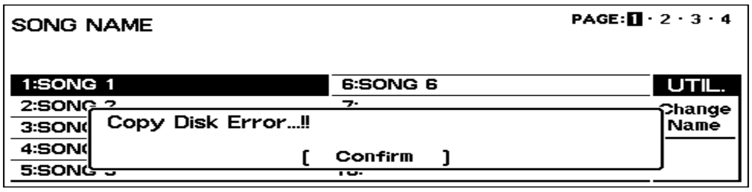


(Ex: 2DD disk is inserted as the copy destination while 2HD disk data has been read as the source.)

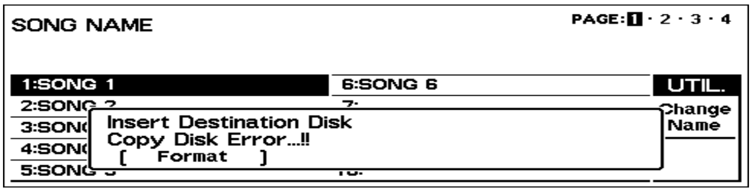


Answer: You have to prepare the same disk type as that of source disk.

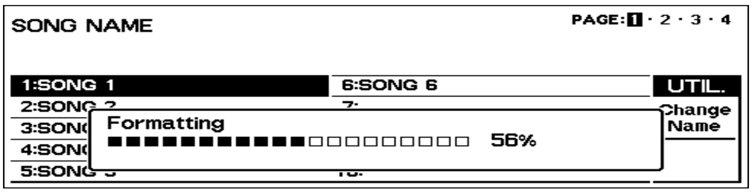
● Reading error.



● The destination disk has not been formatted.

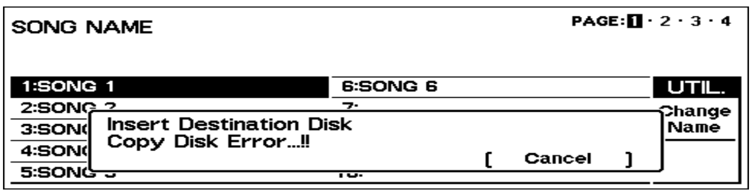


Answer: Press the Data Control buttons under [Format] to execute formatting operation, first.



You can also change disk and insert a formatted disk.

● Others

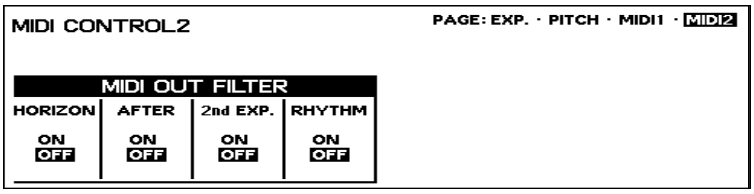


8 MIDI Out filter

Unnecessary MIDI data can be filtered out when you play the Electone using an external sequencing software (PC).

The MIDI Out filter function is equipped with the Electone not to response to unnecessary MIDI data. An additional MIDI Control page is used for this function.

An external MIDI device that receives the MIDI data should have the filtering function when the horizontal touch and aftertouch are unnecessary. If the device doesn't have this function, use the MIDI Out Filter on the Electone.



● The Messages to be filtered:

- **Horizontal Touch Message**
  Even when you don't intend to, Electone's FSV keyboards always send out the horizontal touch messages. You need to cut the data if you use the tone generators like MU series, since they receive the messages and produce the sounds that are applied with pitch bend function.

- **After Touch Message**
  Also, even when you don't intend to, Electone's FSV keyboards always send out the aftertouch messages. In addition to the normal aftertouch, VA aftertouch (Control no. 16) is sent out. If you don't need them you can cut them.

- **2nd Expression Pedal Message**
  This message is transmitted as the Control no. 4. If you don't need the control no. 4 you can cut it.

- **Rhythm Start/Stop Messages**
  Electone can transmit the realtime messages FA (start) and FC (stop). When working with an external sequencer, the sequencer may respond to those messages. You can avoid it with this message set to off.

NOTE:

MU series:
XG tone generators from Yamaha. EL-900 has built in MU50 type tone generator exclusive for XG playback.

NOTE:

VA Aftertouch:
Exclusive to VA tone generation system and can be applied only to Upper keyboard.

NOTE:

The message of the 2nd expression pedal is different from the normal MIDI pitch bend messages.

NOTE:

This MIDI Out Filter function is effective for the external connected devices and not effective for the M.D.R. recording.

Details on Each Voice

Page/Section	Voice Name	Preset		Comments
		Feet	Effect	
1. Upper/Lower **STRINGS**	Strings 1	8'	-	Large strings ensemble.
	Strings 2	8'	-	Relatively small strings ensemble for contemporary music.
	Strings 3	8'	-	Small strings ensemble.
	Strings 4	8'	-	Having specific harmonics for layering other voices.
	Strings 5	8'	-	For legato playing.
	Strings 6	8'	-	Strings with clarity. Appropriate for the fast passages.
	Strings 7	8'	-	Expressive full bodied strings with a slow attack.
	Strings 8	8'	-	Con sordino (with mute) strings.Reproduces softly played string sounds.
	Pizz. Strings	8'	-	Pizzicato strings.
	Trem. Strings	8'	-	Tremolo strings.
	Synth. Strs. 1	8'	Cele.	Synth. strings with softer attack.
	Synth. Strs. 2	8'	Sym.	Bright synth. strings.
	Synth. Strs. 3	8'	Cde	Softer Synth. strings.
2. Lead **VIOLIN**	Violin 1	8'	-	For multi purposes.
	Violin 2	8'	-	For solo with sharp attack.
	Violin 3	8'	-	Bright fidle for country music.
	Violin 4	8'	-	Darker synth. violin with wider dynamic range.
	Violin 5	8'	-	Violin with deep preset vibrato, also suited for chord playing.
	Pizz. Violin	8'	-	Pizzicato violin.
	Cello	8'	-	Cello with realistic rubbed string-instrument feel.
	Kokyu	8'	-	Ancient Chinese fiddle.
3. Pedal **CONTRABASS**	Contra Bass 1	8'	-	Standard type.
	Contra Bass 2	8'	-	True-to-life tight contrabass sounding in an octave unison.
	Contra Bass 3	8'	-	Realistic contrabass solo.
	Pizz. Bass	8'	-	Pizzicato contrabass for classicals.
	Upright Bass	8'	-	For jazz.
4. Upper/Lower **BRASS**	Brass 1	8'	-	Trumpet and trombone ensemble for classicals.
	Brass 2	8'	-	For big band with brighter attack.
	Brass 3	8'	-	With strong impact. Can be used as orchestra hit.
	Brass 4	U16'/L8'	-	Trombone ensemble.
	Brass 5	8'	-	Tight octave brass for contemporary music.
	Synth. Brass 1	8'	-	Synth. brass with sharp attack. Used for Basic Regist. 5.
	Synth. Brass 2	8'	-	Analog type. Can be used as melody line.
	Synth. Brass 3	8'	-	Fat synth. brass.
	Synth. Brass 4	8'	-	Full-bodied synth. Brass sound with unique pitch characteristics.
5. Lower **HORN**	Horn 1	8'	-	Standard horn for classicals.
	Horn 2	8'	-	Horn unison solo. Alpenhorn.
	Horn 3	8'	-	For solo playing.
	Horn 4	8'	-	Impressive horn ensemble.
	Muted Horn	8'	-	Muted horn.
6. Lead **TRUMPET**	Trumpet 1	8'	-	Standard trumpet for classicals.
	Trumpet 2	8'	-	Jazz trumpet 1 with full-bodied sounds.
	Trumpet 3	8'	-	Sweet voice.
	Trumpet 4	8'	-	Jazz trumpet 2 with a peculiar attack.
	Trumpet 5	8'	-	Comical synth. trumpet.
	Trumpet 6	8'	-	Resonant trumpet solo.
	Muted Trp.	8'	-	Harmon mute.
	Trombone 1	U16'/L8'	-	For legato playing.
	Trombone 2	U16'/L8'	-	Bright trombone solo. For fast phrases.
	Trombone 3	U16'/L8'	-	Trombone with the characteristics having strong and resonant tone.
	Muted Trb.	U16'/L8'	-	Cup mute.
	Flugel Horn	8'	-	Flugelhorn.
	Euphonium	U16/L8	-	Euphonium with softer sounds.
7. Pedal **TUBA**	Tuba	16'	-	Accentuated by touch
	Timpani 1	8'	-	Standard timpani.
	Timpani 2	8'	-	Expressive Timpani sounds played with softer mallets.
	Timpani Roll	8'	-	Typical timpani roll.
8. Lead **FLUTE**	Flute 1	8'	-	Standard flute solo.
	Flute 2	8'	-	For legato playing.
	Flute 3	8'	-	Jazz flute with unique attack.
	Flute 4	8'	-	Classical flute with deep vibrato.
	Piccolo	4'	-	Standard piccolo.
	Yokobue	4'	-	Japanese pipe with clear sounds.

* U16'/L8' indicates that the feet settings of each voice are preset to 16' on the upper keyboard and 8' on the lower keyboard.

Page/Section	Voice Name	Preset		Comments
		Feet	Effect	
8. Lead **FLUTE**	Recorder	4'	-	Block floete.
	Ocarina	4'	-	Ocarina with simple but warm sounds.
	Pan Flute	8'	-	Pan Flute.
	Shakuhachi	8'	-	Japanese Shakuhachi with realistic breath noises.
	Whistle	4'	-	Whistle.
9. Lead **OBOE**	Oboe 1	8'	-	Softer oboe.
	Oboe 2	8'	-	Rounder tone with characteristic tonguing. For fast phrases.
	Oboe 3	8'	-	Oboe suited to faster phrases.
	Oboe 4	8'	-	Expressive oboe for classicals.
	English Horn 1	8'	-	Cor Anglais.
	English Horn 2	8'	-	English horn with distinctive reed.
	Bassoon 1	U16'/L8'	-	For legato playing.
	Bassoon 2	U16'/L8'	-	For staccato playing.
	Bassoon 3	U16'/L8'	-	Bassoon with rich resonance even in the lower register.
10. Upper/Lower **CLARINET**	Clarinet 1	8'	-	Standard clarinet.
	Clarinet 2	8'	-	Clarinet solo for jazz and contemporary.
	Clarinet 3	8'	-	Sweet and expressive clarinet.
	Bass Cla.	8'	-	Bass clarinet with fat and resonant sounds.
	Synth. Cla. 1	8'	-	Resonant synth. clarinet.
	Synth. Cla. 2	8'	-	Synth. reed with a unique attack sound.
11. Upper/Lower **SAXOPHONE**	Saxophone 1	U16'/L8'	-	Alto sax.
	Saxophone 2	U16'/L8'	-	Characteristic tenor sax with strong tonguing.
	Sopra. Sax.	8'	-	Standard soprano sax.
	Sax. Ens. 1	U16'/L8'	-	Softer sounds for classicals.
	Sax. Ens. 2	U16'/L8	-	Saxophone section for bigband.
	Synth. Sax.	8'	-	Wind synthesizer with thick sounds in the middle and lower range.
	Synth. Lead 1	8'	-	Softer analog synth. reed.
	Synth. Lead 2	8'	-	Clear synth. reed with a sharp attack.
	Synth. Lead 3	4'	-	Hoarse noise reed.
	Synth. Lead 4	8'	-	Digital synth. reed.
	Synth. Lead 5	8'	-	Synth. reed with thick fourth notes.
	Synth. Lead 6	8'	-	Comical synth. Lead with unique pitch characteristics.
	Synth. Lead 7	8'	-	Synth. Lead having Synth bass image.
12. Upper/Lower **TUTTI**	Tutti 1	8'	-	Strings unison and wood winds ensemble.
	Tutti 2	8'	-	Strings unison and the brasses.
	Tutti 3	8'	-	The brasses for classicals and bands.
	Tutti 4	8'	-	Big band. Softer playing = sax only. Harder playing = 1 octave higher brasses added.
	Tutti 5	8'	-	Wood winds ensemble. Instruments vary depending on the register played.
	Tutti 6	8'	-	Wood winds quintet.
	Tutti 7	8'	-	Brass ensemble.
	Tutti 8	8'	-	Gorgeous brass ensemble.
	Tutti 9	8'	-	Magnificent string ensemble.Rich expressiveness with touch.
	Tutti 10	8'	-	Wood winds ensemble.Thicker than Tutti 6.
13. Upper/Lower **CHORUS**	Chorus 1	8'	-	Female "Ah".
	Chorus 2	8'	-	Male "Wh".
	Chorus 3	8'	-	Mixed chorus.
	Chorus 4	8'	-	Mixed chorus with beautiful resonance. Wh.
	Chorus 5	8'	-	Scat type vocal ensemble.
	Chorus 6	8'	-	Mixed chorus for the sacred music.
	Chorus 7	8'	-	Impressive chorus.
	Chorus 8	8'	-	Chorus for Gospel music.
	Vocal	8'	-	Accentuated solo vocal, "Ah".
14. Upper **HARMONICA**	Harmonica 1	8'	-	Standard type with pitch modulated vibrato.
	Harmonica 2	8'	-	Solo harmonica with filter and amplitude modulated vibrato.
15. Upper/Lower **ORGAN**	Organ 1	8'	-	Small pipe organ. 8'.
	Organ 2	8'	-	Big pipe organ with full coupler.
	Organ 3	8'	-	Nasard stops. 8'+2 2/3'.
	Organ 4	8'	-	Harmonium.
	Jazz Organ 1	16'	Chor.	For solo playing. 16'+8'+5 1/3'.
	Jazz Organ 2	16'	Trem.	16'+8'+2'.
	Jazz Organ 3	16'	Trem.	For cluster playing. 16'+1 3/5'+1 1/3'+1'.
	Jazz Organ 4	16'	Trem.	Fat and noisy jazz organ.
	Pop Organ 1	8'	Chor.	Bright sounds for jazz. 8'+4'+2 2/3'.
	Pop Organ 2	8'	Chor.	For multi purposes.
	Theat. Organ 1	8'	Sym.	8'+4' with slower attack.
	Theat. Organ 2	8'	-	16'+8' with slower attack.
	Accordion	8'	-	Slower attack.
	Bandoneon	8'	-	Attack can be controlled by initial touch.

Page/Section	Voice Name	Preset		Comments
		Feet	Effect	
16. Pedal **ORGAN BASS**	Organ Bass 1	8'	-	Combination organ bass.
	Organ Bass 2	16'	-	Pipe organ bass 1. Standard type.
	Organ Bass 3	16'	-	For jazz. 16'.
	Organ Bass 4	16'	-	Pipe organ bass 2. Full coupler.
17. Upper/Lower **PIANO**	Piano 1	8'	-	For multi purposes.
	Piano 2	8'	-	Brighter sounds. CP80 type.
	Honkytonk	8'	-	Honky tonk piano.
	Elec. Piano 1	8'	Cele.	DX7 type.
	Elec. Piano 2	8'	Cele.	Old fashioned, full bodied electric piano.
	Elec. Piano 3	8'	-	Electric piano with clearly brilliant but deep sounds.
	Elec. Piano 4	8'	-	Bright and brilliant electric piano.
	Harpsichord	8'	-	Standard cembalo.
	Clavi.	16'	-	Funky clavi.
	Clavichord	8'	-	Clavichord with stable and grave sounds.
18. Upper/Lower **GUITAR**	Guitar 1	U16'/L8'	-	Folk guitar. Steel string.
	Guitar 2	U16'/L8'	-	Acoustic jazz guitar. Tone varies depending on the touch.
	Guitar 3	U16'/L8'	-	Classic guitar. Suitable to backing for bossanova.
	12Str. Guitar	U16/L8	-	12-string classic guitar with gorgeous sounds.
	Banjo	8'	-	For country and dixieland.
	Mandolin	8'	Cele.	Standard mandolin.
	Sitar	8'	-	Indian sitar with the different resonances between lower and mid./high ranges.
	Shamisen	8'	-	Japanese classical shamisen.
	Elec. Guitar 1	U16'/L8'	-	For backing.
	Elec. Guitar 2	U16'/L8'	-	For solo playing.
	Muted Guitar	U16'/L8'	-	Muted guitar.
	Dist. Guitar	U16'/L8'	-	Distorted guitar.
	Harp	8'	-	Grand harp.
	Steel Guitar	8'	-	Hawaiian guitar. Effective when used with the glide function.
	Koto	8'	-	Japanese Koto.
	Taisho Koto	4'	Cele.	Japanese Taisho Koto.
19. Upper/Lower **VIBRAPHONE**	Vibraphone	8'	-	Standard vibraphone.
	Glocken	4'	-	Glockenspiel.
	Celesta	4'	-	Celesta.
	Music Box	4'	-	Antique music box.
	Marimba	8'	-	Concert marimba.
	Xylophone	4'	-	Tone varies depending on the initial touch.
	Chime	4'	-	Chime.
	Synth. Chime	8'	Cele.	Starry chime.
	Steel Drum	8'	-	Steel Drum.
20. Pedal **ELECTRIC BASS**	Elec. Bass 1	8'	-	For multi purposes.
	Elec. Bass 2	16'	-	Slap bass.
	Elec. Bass 3	16'	-	Plucked bass with hard attack.
	Elec. Bass 4	16'	Cele.	Fretless bass, also suited for solo playing.
	Elec. Bass 5	16'	-	Expressive Electric bass.
	Synth. Bass 1	16'	-	Sustained sounds.
	Synth. Bass 2	16'	-	With remarkable attack.
	Synth. Bass 3	16'	-	Tone varies depending on the touch.
	Synth. Bass 4	16'	-	Resonant synth. bass.
	Synth. Bass 5	16'	-	Synth. Bass suitable for playing gradually changing sounds.
21. Upper/Lower **COSMIC**	Cosmic 1	4'	-	Decay type. For multi purposes. UK in Basic Regist. 4.
	Cosmic 2	8'	-	The lower register of celesta. LK and PK in Basic Regist. 4.
	Cosmic 3	8'	-	Brass type.LK in Basic Regist. 5.
	Cosmic 4	8'	-	Decay type. With fantastic image.
	Cosmic 5	8'	-	Spacious sounds with feedback.
	Cosmic 6	8'	-	Synth. brass type.
	Cosmic 7	8'	-	Vocal type with feedback.
	Cosmic 8	8'	-	Distortion type with feedback.
	Cosmic 9	8'	-	Decay type with unique feedback.
	Cosmic 10	8'	-	Clear synth. pad.
	Cosmic 11	8'	-	Digital synth. pad.
	Cosmic 12	8'	-	Chorus type synth. pad.
	Cosmic 13	8'	-	Special sound effect with a slower attack. The sounds drastically changes.
	Cosmic 14	8'	-	Fantastic digital music box.
	Cosmic 15	8'	-	Ethnic synth. percussion.
	Cosmic 16	16'	-	Special sound effect with a complicated mixture of various sounds.

page	Voice Name	Preset		Horizontal	Recommended Range *1	Remarks
		Feet	Effect			
VA Acoustic	V-Flute	8		Pitch	G2~A6	Flute, containing noise factors, which may squeak in the high register. Setting the Touch Tone (After) higher and applying keyboard pressure can result in flutter tonguing.
	V-Oboe	8		Pitch	C3~F5	Wider dynamic range with the Touch Tone effect.
	V-Clarinet	8		Pitch	D2~F5	Breath noise in pianissimo and brighter sound with the pitch a little bit lowered in fortissimo.
	V-Sopra. Sax.	8		Pitch	A 2~D5	Rounder and softer soprano saxophone.
	Alto Sax.	8		Pitch	D 2~G4	A bright alto saxophone for contemporary music.
	Tenor Sax.	16		Pitch	A 2~C4	Multipurpose tenor saxophone. Softer in pianissimo and brighter in fortissimo.
	Breath Sax.	16		Pitch	A 2~C4	Softer tenor saxophone with much breath noise suited for music in slow tempo.
	V-Trumpet	8		Embouchrue *2	A 2~A 4	Softer trumpet. Lip-slide can be obtained with the Horizontal touch.
	V-Trombone	16		Embouchure	E1~G3	Lip-slide can be obtained with the Horizontal touch. Also, cracking image with the After touch.
	V-Shakuhachi	8		Embouchure		Higher Touch Tone (After) setting increases breath noises and then squeaks the sounds.
	V-Kokyu	8		Pitch		Palying with softer touch produces hoarse sounds.
	V-Sitar	8		Pitch		Palying with harder touch squeaks the sounds.
VA Virtual	Pan Pipe	8		Pitch	E2~G5	Setting the Touch Tone (After) higher and applying keyboard pressure can result in flutter tonguing.
	Air Reed	8		Pitch	A2~C5	An image of adopting an oboe reed to a saxophone.
	Thin Reed	8		Pitch	E2~G5	An image of adopting a clarinet mouthpiece to a flute.
	Grass Reed	4		Pitch	E2~G5	An image of adopting a bassoon reed to a brass wind instrument. After touch changes the pitch.
	Soft Reed	8		Embouchure	A2~G5	An image of adopting a clarinet mouthpiece to a brass wind instrument.
	Buzz String	8		Pitch	A2~F5	An image of bowed-wind instrument.
	Bow Strings	8		Pitch	E1~E6	Artificially synthesized strings.
	Waspy Horn	8		Embouchure	C1~G4	An image of adopting a brass wind instrument mouthpiece to a wind instrument. After touch affects the muted condition. Lip-slide can be obtained with the Horizontal touch.
VA Electronic	Jazz Guitar	16		Pitch	E1~E5	Softer and warm Jazzy sounds.
	Picked Guitar	16		Pitch	E1~E5	Plucked guitar sounds with a pick.
	Saw Lead	8		Pitch	C1~C5	Multipurpose lead sounds. After touch affects to change the filter.
	Edge Lead	16		Pitch	C1~C4	Sound suited for synthe. bass with a sharp attack portion. After touch affects to change the filter.
	Dist.Lead	16	Dist.	Pitch	G1~C5	Distorted lead sounds. Setting the Touch Tone (After) higher and applying keyboard pressure can raise the pitch one octave.
	Woody Lead	8		Pitch	C2~G5	Lead sound with woody quality.
	Muted Lead	8		Pitch	C2~C5	Lead sound with wah-wah effect. After touch affects the wah-wah effect.
	Talken Lead	16		Pitch	C1~C5	Talkative lead sound. Setting the Touch Tone (After) higher and applying keyboard pressure can result in hum noises.
VA Custom	Custom1	16		Pitch	—	Sounds tapping an opening of a pipe with your palm.
	Custom2	8		Embouchure	—	Sounds scraping a metalic plate. After touch affect the degree of scraping.
	Custom3	8		Pitch	—	Sounds hitting a metalic plate with a wood block. Initial touch affects to change the hardness of the wood block.
	Custom4	8		Pitch	—	Softer playing results in sounds of wind. Applying the keyboard pressure (After touch) produces a distorted guitar sounds.
	Custom5	8		Pitch	—	Jet noise sounds. Applying the keyboard pressure produces lead sounds.
	Custom6	8		Pitch	—	Sounds colliding a metalic plate with another.

*1 Each acoustic instrument has its own suited range. Be aware that exceeding the range may create an unexpected and unrealistic (non-musical) sounds.
*2 Embouchure indicates the tightness of the lips against the reed or against each other in the wind instruments, and the force of the bow against the string.

MIDI Data Format

1. Channel Messages

1.1 EL Mode

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
8n,nn,00-7F	Note Off	×	1ch	UK
		×	2ch	LK
		×	3ch	PK
		×	(4ch)*	LEAD 1
		×	5-14ch	XG
		×	15ch	Keyboard Percussion
9n,nn,00	Note Off	(1ch)*	1ch	UK
9n,nn,01-7F	Note On	(2ch)*	2ch	LK
		(3ch)*	3ch	PK
		×	(4ch)*	LEAD 1
		×	5-14ch	XG
		×	15ch	Keyboard Percussion
Bn,00,00-7F Bn,20,00-7F	Bank select	×	5-14ch	XG
Bn,01,00-7F	Modulation	×	5-14ch	XG
Bn,04,00-7F	2nd Expression	16ch	16ch	Control
		(4ch)**	(4ch)*	LEAD 1
Bn,05,00-7F	Portamento Time	×	5-14ch	XG
Bn,06,00-7F Bn,26,00-7F	Data Entry	×	5-14ch	XG
Bn,07,00-7F	Volume	×	5-14ch	XG
Bn,0A,00-7F	Pan	×	5-14ch	XG
Bn,0B,00-7F	Expression	16ch	16ch	Control
			5-14ch	XG
Bn,10,00-7F	After Touch for VA Voices	(1ch)*	1ch	UK
Bn,40,00-7F	Hold	×	5-14ch	XG
Bn,41,00-7F	Portamento	×	5-14ch	XG
Bn,42,00-7F	Sostenuto	×	5-14ch	XG
Bn,43,00-7F	Soft Pedal	×	5-14ch	XG
Bn,47,00-7F	Resonance	×	5-14ch	XG
Bn,48,00-7F	Release Time	×	5-14ch	XG
Bn,49,00-7F	Attack Time	×	5-14ch	XG
Bn,4A,00-7F	Brightness	×	5-14ch	XG
Bn,54,00-7F	Portamento Control	×	5-14ch	XG
Bn,5B,00-7F	Reverb Send Level	×	5-14ch	XG
Bn,5D,00-7F	Chorus Send Level	×	5-14ch	XG
Bn,5E,00-7F	Variation Send Level	×	5-14ch	XG
Bn,60,00-7F Bn,61,00-7F	Data Increment Data Decrement	×	5-14ch	XG
Bn,62,00-7F Bn,63,00-7F	NRPN LSB NRPN MSB	×	5-14ch	XG
Bn,64,00-7F Bn,65,00-7F	RPN LSB RPN MSB	×	5-14ch	XG
Bn,78,00 Bn,79,00 Bn,7B,00 Bn,7C,00 Bn,7D,00 Bn,7E,00	All Sounds Off Reset All Controllers All Note Off Omni Off Omni On Mono	×	5-14ch	XG
Bn,7F,00	Poly			

* Can be changed in the MIDI settings.

** Can be output when assigned to the channel 4.

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
Cn,nn	Program Change	×	1ch	UK
		×	2ch	LK
		×	3ch	PK
		×	5-14ch	XG
		16ch	16ch	Control
Dn,00-7F	After Touch	(1ch)*	1ch	UK
		(2ch)*	2ch	LK
		(3ch)*	3ch	PK
			(4ch)*	LEAD 1
		1	5-14ch	XG
En,00-7F,00-7F	Pitch Bend	(1ch)*	1ch	UK
		(2ch)*	2ch	LK
		×	(4ch)*	LEAD 1
			5-14ch	XG

* Can be changed in the MIDI settings.

** Can be output when assigned to the channel 4.

1.2 XG Mode

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
8n,nn,00-7F	Note Off	×	1-16ch	
9n,nn,00 9n,nn,01-7F	Note Off Note On	(1ch) (2ch)* (3ch)*	 1-16ch	UK LK PK
Bn,00,00-7F Bn,20,00-7F	Bank select	×	1-16ch	
Bn,01,00-7F	Modulation	×	1-16ch	
Bn,04,00-7F	2nd Expression	16ch (4ch)**	×	Control LEAD 1
Bn,05,00-7F	Portamento Time	×	1-16ch	
Bn,06,00-7F Bn,26,00-7F	Data Entry	×	1-16ch	
Bn,07,00-7F	Volume	×	1-16ch	
Bn,0A,00-7F	Pan	×	1-16ch	
Bn,0B,00-7F	Expression	16ch	 1-16ch	Control
Bn,10,00-7F	After Touch for VA Voices	(1ch)*	×	UK
Bn,40,00-7F	Hold	×	1-16ch	
Bn,41,00-7F	Portamento	×	1-16ch	
Bn,42,00-7F	Sostenuto	×	1-16ch	
Bn,43,00-7F	Soft Pedal	×	1-16ch	
Bn,47,00-7F	Resonance	×	1-16ch	
Bn,48,00-7F	Release Time	×	1-16ch	
Bn,49,00-7F	Attack Time	×	1-16ch	
Bn,4A,00-7F	Brightness	×	1-16ch	
Bn,54,00-7F	Portamento Control	×	1-16ch	
Bn,5B,00-7F	Reverb Send Level	×	1-16ch	
Bn,5D,00-7F	Chorus Send Level	×	1-16ch	
Bn,5E,00-7F	Variation Send Level	×	1-16ch	
Bn,60,00-7F Bn,61,00-7F	Data Increment Data Decrement	×	1-16ch	
Bn,62,00-7F Bn,63,00-7F	NRPN LSB NRPN MSB	×	1-16ch	
Bn,64,00-7F Bn,65,00-7F	RPN LSB RPN MSB	×	1-16ch	

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
Bn,78,00	All Sounds Off	×	1-16ch	
Bn,79,00	Reset All Controllers			
Bn,7B,00	All Note Off			
Bn,7C,00	Omni Off			
Bn,7D,00	Omni On			
Bn,7E,00	Mono			
Bn,7F,00	Poly			
Cn,00-7F	Program Change	16ch		Control
			1-16ch	
Dn,00-7F	After Touch	(1ch)*		UK
		(2ch)*		LK
		(3ch)*		PK
			1-16ch	
En,00-7F,00-7F	Pitch Bend	(1ch)*		UK
		(2ch)*		LK
		×	1-16ch	

* Can be changed in the MIDI settings.

** Can be output when assigned to the channel 4.

2. Realtime Messages

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
F8	Clock	○	○*	
FA	Start	○	○	
FC	Stop	○	○	
FE	Active Sensing	○	○	
FF	Reset	×	×	

* Received only when in the Ext. mode

3. System Exclusive Messages

3.1 Format

Universal Realtime Messages

Code (Hexadecimal)	Message	Transmit	Receive
F0,7F,7F,04,01,SS,TT,F7	XG Master Volume	×	○
XN			

Universal Non-Realtime Messages

Code (Hexadecimal)	Message	Transmit	Receive
F0,7E,7F,09,01,F7	GM ON	×	○
XN			

XG Native

Code (Hexadecimal)	Message	Transmit	Receive
F0,43,1N,4C,AH,AM,AL,..data..,F7	XG Parameter Change	×	○
F0,43,0N,4C,BH,BL,AH,AM,AL,..data..,cc,F7	XG Bulk Dump	×	○
F0,43,1N,27,30,00,00,MM,LL,cc,F7	XG Master Tuning	×	○
F0,43,1N,4C,00,00,7E,00,F7	XG System On	×	○

Electone/Single Keyboard Common Messages

Code (Hexadecimal)	Message	Transmit	Receive
F0,43,73,01,02,F7	Request for Internal Synch. Mode	×	○
03	Request for External Synch. Mode	×	○

Electone Exclusive

Code (Hexadecimal)	Message	Transmit	Receive
F0,43,70,70,00,...(Data)...F7	Bulk Dump Data	×	○
78		○	○
F0,43,70,ID,00,F7	Model ID Data	○	×
F0,43,70,70,nn(*1),F7	Request-to-Send Data	×	○
78		×	○
F0,43,70,70,nn(*2),F7	Request-to-Receive Data	×	○
78		×	○
F0,43,70,70,01,ID1,ID2,SPl,SPh,DCl,DCh,F7	Request-to-Send Voice parameter data	×	○
78		×	○
F0,43,70,70,02,ID1,ID2,SPl,SPh,DCl,DCh,F7	Request-to-Receive Voice parameter data	×	○
78		×	○
F0,43,70,70,30,F7	Request-to-Send Model ID data	×	○
F0,43,70,70,38,7F,F7	Bulk Dump Acknowledge	×	×
00	Bulk Dump Unacknowledge	○	×
F0,43,70,70,40,nn(*3),7F,F7	Switch On	○	○
00	Switch Off	○	○
F0,43,70,70,40,50,TL,TH,F7(*4)	Tempo	○	○
F0,43,70,78,41,cd,dd,F7(*5)	Panel Switch Events	○	○
F0,43,70,78,42,...(Data)...F7	Current Registration Data	○	○
F0,43,70,78,44...(Data)...(*5),F7	EL MIDI Parameters	○	○
F0,43,70,70,70,nn(*6),F7	External MDR	*	*
F0,43,70,70,73,F7	EL ON	×	○
F0,43,70,70,78,SC,NC,F7	Bar Signal	○	○

X : don't care N : Device Number(“0” on EL-900m) ID=49

*1 Data Codes to Send

nn	Data
10	All RAM
11	Registrations
12	Rhythm Sequences
14,15	User Patterns
16	User Voices
17	Keyboard Percussion Assignments

*2 Data Codes to Receive

nn	Data
20	All RAM
21	Registrations
22	Rhythm Sequences
24,25	User Patterns
26	User Voices
27	Keyboard Percussion Assignments

*3 Switches

nn	Switch	Transmit	Receive
45	Left Footswitch	○	○
47	Knee Lever	○	○
48	Fill In 1	○	○
4B	Intro./Ending	○	○
4D	Solo Bar	○	○

*4 Switch Codes

Selectors

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
02	UK Voice 1	○	[00-0D]	○	[00-0D]	Switch Number
03	LK Voice 1	○	[00-0D]	○	[00-0D]	Switch Number
04	UK Voice 2	○	[00-0D]	○	[00-0D]	Switch Number
05	LK Voice 2	○	[00-0D]	○	[00-0D]	Switch Number
06	LEAD Voice 1	○	[00-04]	○	[00-04]	Switch Number
07	Pedal Voice 1	○	[00-04]	○	[00-04]	Switch Number
08	Pedal Voice 2	○	[00-04]	○	[00-04]	Switch Number
09	LEAD Voice 2	○	[00,05-08]	○	[00-08]	Switch Number
0B	Rhythm	○	[00-0B]	○	[00-04]	Switch Number
0F	Registration Memory	×		○	[00-0F]	

Volume

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
12	UK Voice 1	○	[00-7F]	○	[00-7F]	Volume Data 00:MAX,7F:MIN
13	LK Voice 1	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
14	UK Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
15	LK Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
16	LEAD Voice 1	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
17	Pedal Voice 1	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
18	Pedal Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
19	LEAD Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
1A	Rhythm	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
1B	Reverb	○	[00-7F]	○	[00-7F]	Depth Data; 00:MAX,7F:MIN

Flute Voice

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
30	Upper Flute Voice	○	[00-01]	○	[00-01]	00:OFF,01:ON
31	Lower Flute Voice	○	[00-01]	○	[00-01]	00:OFF,01:ON

To Lower

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
36	LEAD Voice 1	○	[00-01]	○	[00-01]	00:OFF,01:ON
37	Pedal Voice 1	○	[00-01]	○	[00-01]	00:OFF,01:ON
38	Pedal Voice 2	○	[00-01]	○	[00-01]	00:OFF,01:ON

Solo Mode

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
39	LEAD Voice 2 Solo (Bar)	○	[00-01]	○	[00-01]	00:OFF,01:ON

Brilliance

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
42	UK Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
43	LK Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
44	UK Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
45	LK Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
46	LEAD Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
47	Pedal Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
48	UK Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
49	LEAD Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow

Sustain

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
50	Upper Keyboard	○	[00-01]	○	[00-01]	00:OFF,01:ON
51	Lower Keyboard	○	[00-01]	○	[00-01]	00:OFF,01:ON
52	Pedalboard	○	[00-01]	○	[00-01]	00:OFF,01:ON

Solo Bar

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
59	Solo Bar	×	[00-01]	○	[00-01]	00:OFF,01:ON

Keyboard Percussion

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
5B	Lower Keyboard	○	[00-01]	○	[00-01]	00:OFF,01:ON
5C	Pedal Board	○	[00-01]	○	[00-01]	00:OFF,01:ON

Disable

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
5F	Disable	○	[00-01]	○	[00-01]	00:OFF,01:ON

Tremolo

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
60	Tremolo	○	[00-01]	○	[00-01]	00:SLOW,01:FAST

Rhythm Sequence

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
61	Sequence 1	○	[00-01]	○	[00-01]	00:OFF,01:ON
62	Sequence 2	○	[00-01]	○	[00-01]	00:OFF,01:ON
63	Sequence 3	○	[00-01]	○	[00-01]	00:OFF,01:ON
64	Sequence 4	○	[00-01]	○	[00-01]	00:OFF,01:ON

*5 EL MIDI Parameters

Voice Section Parameters

Panel Voice Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
00	00-07	00-0D	2	00-7F	Voice Assign Number H		○	[00-7F]	○	[00-7F]	
				00-7F	Voice Assign Number L		○	[00-0F]	○	[00-7F]	
00	00-07	10	1	00-0D	Voice Selector Number		×	[00-0D]	○	[00-0D]	
00	00-07	11	1	00-7F	Volume	00:MIN 7F:MAX	×	[00-7F]	○	[00-7F]	
00	00-07	12	1	00-7F	Reverb Send Level	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
00	00-07	13	1	00-7F	Brilliance	00:Brilliant 40:Center 7F:Mellow	×	[00] [15] [2B] [40] [55] [6B] [7F]	○	[00-0A] [0B-17] [18-35] [36-4A] [4B-5F] [60-75] [76-7F]	
00	00-07	14	1	00-04	Feet	00:Preset 01:16Feet 02:8Fee 03:4Feet 04:2Feet	○	[00] [01] [02] [03] [04]	○	[00][05-7F] [01] [02] [03] [04]	
00	00-07	15	1	00-7F	Pan	00:Right 40:Center 7F:Left	○	[0B] [1D] [2B] [40] [55] [63] [75]	○	[00-11] [12-25] [26-31] [32-4E] [4F-5A] [5B-6E] [6F-7F]	
00	00-07	16	1	00-7F	Initial Touch Sensitivity	00: Min. 7F: Max.	○	[00-7F]	○	[00-7F]	
00	00-07	17	1	00-7F	After Touch Sensitivity	00: Min. 7F: Max.	○	[00-7F]	○	[00-7F]	
00	00-07	19	1	00-01	User Vibrato	00:PRESET 01:USER	○	[00] [01]	○	[00] [01-7F]	
00	00-07	1A	1	02-1A	Vibrato Delay	00:Short 7F:Long	○	[02-1A]	○	[00-7F]	
00	00-07	1B	1	00-54	Vibrato Depth	00: Min. 7F: Max.	○	[00-54]	○	[00-7F]	
00	00-07	1C	1	3C-6C	Vibrato Speed	00:Slow 7F:Fast	○	[3C-6C]	○	[00-7F]	
00	00-05	1D	1	00-7F	Pitch (Horizontal)	00: Narrow 7F: Wide	○	[00-7F]	○	[00-7F]	
00	00-07	1E	1	00-7F	Touch Vibrato On/Off	00:OFF 01:ON	○	[00] [7F]	○	[00] [01-7F]	
00	00-07	1F	1	00-01	To Lower/SOLO(BAR)	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	 LEAD2:SOLO(BAR)
00	04-07	20	1	00-02	Slide	00:OFF 01:ON 02:KneeControl	○	[00] [01] [02]	○	[00] [01] [02]	
00	04-05	21	1	02-7F	Slide Speed	02:Fast 7F:Slow	○	[02-7F]	○	[00-7F]	
00	04-05	22	1	00-2B	Detune	00:Normal 2B:TuneUP	○	[00-2B]	○	[00-7F]	
00	00-01 04-07	23	1	00-01	2nd Expression Pedal	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
00	00-05	24	1	00-01	Glide	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
00	06-07	28	1	00-01	Mono/Poly	00:Mono 01:Poly	○	[00] [01]	○	[00] [01-7F]	

Flute Voice Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
01	00-01	00	1	00-7F	FLUTE 16Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	01	1	00-7F	FLUTE 8Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	02	1	00-7F	FLUTE 5-1/3Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	03	1	00-7F	FLUTE 4Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	04	1	00-7F	FLUTE 2-2/3Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	05	1	00-7F	FLUTE 2Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	06	1	00-7F	FLUTE 1-3/5Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	08	1	00-7F	FLUTE 1Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	09	1	43-7F	FLUTE Response	43:Slow 7F:Fast	○	[43-7F]	○	[00-7F]	
01	00-01	0A	1	00-7F	ATTACK 4Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	0B	1	00-7F	ATTACK 2-2/3Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	0C	1	00-7F	ATTACK 2Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	0D	1	30-48	ATTACK Length	30:Short 48:Long	○	[30-48]	○	[00-7F]	
01	00-01	0E	1	00-7F	Click	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	11	1	00-7F	Flute Coupler On/Off	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	
01	00-01	12	1	00-7F	Volume	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	13	1	00-7F	Reverb Send Level	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
01	00-01	20	1	00-07 40-47	Parameter Load	00-07:PresetParameter 40-47:UserParameter	○	[00-07] [40-47]	○	[00-07] [40-47]	
01	00-01	21	1	40-47	Parameter Save	40-47:UserParameter	○	[40-47]	○	[40-47]	

Effect Parameters (Voice Sections)

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
00-01	00-07	3F	1	00-06	Effect Select	00:Preset 01:OFF 02:Tremolo 03:Symphonic 04:Delay 05:Flanger 06:Distortion	○	[00] [01] [02] [03] [04] [05] [06]	○	[00][07-7F] [01] [02] [03] [04] [05] [06]	
00-01	00-07	40-42	1	00-7F	Reverb		×	[00-7F]	○	[00-7F]	
00-01	00-07	48-4A	1	00-7F	Tremolo		×	[00-7F]	○	[00-7F]	
00-01	00-07	50	1	00-7F	Symphonic		○	[00-7F]	○	[00-7F]	
00-01	00-07	58-5B	1,2	00-7F	Delay		○	[00-7F]	○	[00-7F]	
00-01	00-07	60-62	1	00-7F	Flanger		○	[00-7F]	○	[00-7F]	
00-01	00-07	68-69	1	00-7F	Distortion		○	[00-7F]	○	[00-7F]	

Keyboard Parameters

Sustain Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
02	00-02	00	1	00-01	Sustain On/Off	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	
02	00-02	01	1	15-3D	Length	19:Short(PK), 15:Short(UK, LK) 30:Long(PK), 37:Long(UK, LK)	○	[15-3D]	○	[00-7F]	

Keyboard Percussion Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
02	01-02	10	1	00-01	Keyboard Percussion	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	
02	01-02	11	1	00-08	Modes	00:Preset 01-08:UserAssign1-8	○	[00] [01-08]	○	[00] [01-08]	

Effect Parameters (Keyboard)

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
02	00-02	40-42	1		Reverb		×	[00-7F]	○	[00-7F]	
02	00-02	48-4A	1		Tremolo		×	[00-7F]	○	[00-7F]	
02	00-02	50	1		Symphonic		×	[00-7F]	○	[00-7F]	
02	00-02	58-5B	1,2		Delay		×	[00-7F]	○	[00-7F]	
02	00-02	60-62	1		Flanger		×	[00-7F]	○	[00-7F]	
02	00-02	68-69	1		Distortion		×	[00-7F]	○	[00-7F]	

Rhythm

Rhythm Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	00	00-0B	1	00-65 67-98	Pattern Assign Number	Pattern Numbers	○	[00-62]	○	[00-62]	
03	00	10	1	00-0B	Pattern Select Number	Selector Switch Numbers	×	[00-0B]	○	[00-0B]	
03	00	11	1	00-7F	Volume	00:MIN 7F:MAX	×	[00-7F]	○	[00-7F]	
03	00	12	1	00-7F	Reverb Send Level	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
03	00	14	1	00-01	Auto Variation	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
03	00	15	1	00-7F	Rhythm Balance	00:Cymbal 40:Center 7F:Drums	○	[00-7F]	○	[00-7F]	
03	00	16	1	00-01	2nd Expression Tempo Control	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
03	00	17	1	00-03	Footswitch Rhythm Mode	00:OFF 01:RhythmStop 02:Ending 03:FillIn	○	[00] [01] [02] [03]	 ○	[00][04-7F] [01] [02] [03]	

Rhythm Sequence Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	01	00-03	1	00-01	Rhythm Sequence	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	

Accompaniment Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	02	10	1	00-03	Pattern Selector Number	00:Type1	○	[00]	○	[00]	
						01:Type2		[01]		[01]	
						02:Type3		[02]		[02]	
						03:Type4		[03]		[03]	
03	02	11	1	00-01	Volume Mute	00:OFF	○	[00]	○	[00]	
						01:MUTE		[01]		[01-7F]	
03	02	12	1	00-7F	Volume	00:MIN	○	[00-7F]	○	[00-7F]	
						7F:MAX					
03	02	13	1	00-7F	Reverb Send Level	00:MIN	○	[00-7F]	○	[00-7F]	
						7F:MAX					

A.B.C. Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	03	00	1	00-03	A.B.C. Mode	00:OFF	○	[00]	○	[00][04-7F]	
						01:SingleFinger		[01]		[01]	
						02:Fingerd		[02]		[02]	
						03:CustomABC		[03]		[03]	
03	03	01	1	00-01	Lower Memory	00:OFF	○	[00]	○	[00]	
						01:ON		[01]		[01-7F]	
03	03	02	1	00-01	Pedal Memory	00:OFF	○	[00]	○	[00]	
						01:ON		[01]		[01-7F]	

M.O.C. Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	04	00	1	00-03	M.O.C. Mode	00:OFF	○	[00]	○	[00][04-7F]	
						01:Close2Note		[01]		[01]	
						02:Close3Note		[02]		[02]	
						03:PassBOpen		[03]		[03]	
03	04	01	1	00-01	M.O.C. Knee Cntrol	00:OFF	○	[00]	○	[00]	
						01:ON		[01]		[01-7F]	

Overall

System Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
04	00	00	1	00-01	Disable	00:OFF	×	[00]	○	[00]	
						01:ON		[01]		[01-7F]	
04	00	01	1	00-01	Flute Coupler Attack Mode	00:EachKey	○	[00]	○	[00]	
						01:FirstNewKey		[01]		[01-7F]	
04	00	02	1	3A-46	Transpose	3A:KeyDown	○	[3A]	○	[3A]	
						40:Normal		[40]		[40]	
						46:KeyUp		[46]		[46]	
04	00	03	1	00-0B	2nd Expression Range	01:100 ¢	○	[01-0C]	○	[01-0C]	
						0C:1200 ¢					
04	00	04	1	00-03	Footswitch Mode	00:OFF	○	[00]	○	[00][04-7F]	
						01:Rhythm		[01]		[01]	
						02:Glide		[02]		[02]	
						03:Tremolo		[03]		[03]	
04	00	05	1	3C-4F	Pitch	3C:PitchDown	○	[3C-4F]	○	[3C-4F]	
						40:Normal					
						4F:PitchUp					
04	00	06	1	04-1C	Glide Speed	04:Fast	○	[04-1C]	○	[00-7F]	
						1C:Slow					
04	00	07	1	34-4C	Manual Balance	34:Upper	○	[34-4C]	○	[00-7F]	
						40:Center					
						4C:Lower					
04	00	09	1	00-01	L.I.T.	00:Mode1	○	[00]	○	[00]	
						01:Mode2		[01]		[01]	
04	00	0A	1	00-01	Expression INT/EXT	00:Internal	×	[00]	○	[00][02-7F]	
						01:External		[01]		[01]	

Effect Parameters (Overall)

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
04	00	40-42	1		Reverb		○	[00-7F]	○	[00-7F]	
04	00	48-4A	1		Tremolo		○	[00-7F]	○	[00-7F]	
04	00	50	1		Symphonic		×	[00-7F]	○	[00-7F]	
04	00	58-5B	1,2		Delay		×	[00-7F]	○	[00-7F]	
04	00	60-62	1		Flanger		×	[00-7F]	○	[00-7F]	
04	00	68-69	1		Distortion		×	[00-7F]	○	[00-7F]	

*6 External MDR

nn	Command	Transmit	Receive
01	Play Start	×	○
02	Play Stop	×	○
03	Record Start	×	○
04	Record Stop	×	○

MIDI Implementation Chart

YAMAHA [Electone-EL mode] / Model: EL-900m

Date: 01. Dec. 2000
Version: 1.00

Function		Transmit	Receive	Remarks
Basic Channel	Default	1, 2, 3, 16 *1	1-3, 5-16 *2	
	Changed	1-16	4	
Mode	Default	Mode 3	Mode 3	
	Messages	×	×	
	Altered	************************	×	
Note Number		36-96 *3	0-127 *4	
	True Voice	************************		
Velocity	Note ON	○ 9nH, v=1-127	○ 9nH, v=1-127	
	Note OFF	○ 9nH, v=0	○ 9nH, v=0, 8nH	
After Touch	Key's	×	×	
	Ch's	○	○	
Pitch Bend		○ *5	○ *5	
Control Change	0, 32	×	○ *6	Bank Select
	1, 5, 7, 10	×	○ *6	
	4	○ *7	○ *7	2nd Expression Pedal
	6, 38	×	○ *6	Data Entry
	11	○ *7	○ *6, 7	Expression Pedal
	16	○ *8	○ *8	VA After Touch
	96, 97	×	○ *6	Data Entry SW
	64-67	×	○ *6	
	71-74	×	○ *6	Sound Controller
	84, 91, 93, 94	×	○ *6	
	98-99, 100-101	×	○ *6	NRPN, RPN
	120, 121	×	○ *6	
Program Change		○ *10	○ *11	
	Range	************************		
System Exclusive		○	○	
System Common	Song Position	×	×	
	Song Select	×	×	
	Tune	×	×	
System Real Time	Clock	○	○ *9	
	Commands	○	○	(FAH, FCH)
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	×	○ (123-127) *11	
	Active Sense	○	○	
	Reset	×	×	

Notes

*1 Ch 1: UK; Ch 2: LK; Ch 3: PK; Ch 16: Control
*2 Ch 1: UK; Ch 2: LK; Ch 3: PK; Ch 4: LEAD 1; Chs 5 - 14: XG; Ch 15: Keyboard
*3 UK: 48 - 96; LK: 36 - 84; PK: 36 - 55
*4 UK, LK, PK, LEAD 1: 36 - 96; XG: 0 - 127; Keyboard Percussion: 3 - 127
*5 UK: UK Horizontal Touch; LK: LK Horizontal Touch
*6 XG only
*7 Control only
*8 UK only
*9 External Mode only
*10 Control: 0 - 15, 112 - 116
*11 UK, LK, PK, Control: 0 - 15, 112 - 116; XG: 0 - 127

Mode 1 : OMNI ON, POLY　　Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY　　Mode 4 : OMNI OFF, MONO

○ : YES
× : NO

YAMAHA [Electone-XG mode] / Model: EL-900m

Date: 01. Dec. 2000
Version: 1.00

Function		Transmit *12	Receive	Remarks
Basic Channel	Default Changed	1, 2, 3, 16 1-16	1-16 1-16	
Mode	Default Messages Altered	Mode3 X ************************	Mode 3 X X	
Note Number	 True Voice	36-96 ************************	0-127	
Velocity	Note ON Note OFF	O 9nH, v=1-127 O 9nH, v=0	O 9nH, v=1-127 O 9nH, v=0, 8nH	
After Touch	Key's Ch's	X O	X O	
Pitch Bend		O	O	
Control Change	0, 32 1, 5, 7, 10 4 6, 38 11 16 96, 97 64-67 71-74 84, 91, 93, 94 98-99, 100-101 120, 121	X X O X O O X X X X X X	O O X O O X O O O O O O O	Bank Select 2nd Expression Pedal Data Entry Expression Pedal VA After Touch Data Entry SW Sound Controller NRPN, RPN
Program Change	 Range	O 0-15, 112-116 ************************	O	
System Exclusive		O	O	
System Common	Song Position Song Select Tune	X X X	X X X	
System Real Time	Clock Commands	O O	X X	
Aux Messages	Local ON/OFF All Notes OFF Active Sense Reset	X X O X	X O (123-127) O X	
Notes		*12 The same as the one in the EL Mode		

Mode 1 : OMNI ON, POLY　　Mode 2 : OMNI ON, MONO　　O : YES
Mode 3 : OMNI OFF, POLY　　Mode 4 : OMNI OFF, MONO　　X : NO

Specifications

KEYBOARD	**Keyboards**	Upper: 49 keys (C – C), Lower: 49 keys (C – C), Pedal: 20 keys (C – G)
Touch Tone	**Initial Touch**	Upper, Lead, Lower, Pedal
	After Touch	Upper, Lead, Lower, Pedal
Pitch	**Horizontal Touch**	Upper, Lead, Lower
VOICE	**Tone Generation**	AWM & FM, VA
	Upper Keyboard Voice 1, 2 **Lower Keyboard Voice 1, 2**	Strings 1, 2, 3, 4, 5, 6, 7, 8, Pizz. Strings, Tremolo Strings, Synth. Strings 1, 2, 3; Brass 1, 2, 3, 4, 5, Synth. Brass 1, 2, 3, 4; Clarinet 1, 2, 3, Bass Clarinet, Synth. Clarinet 1, 2; Saxophone 1, 2, Soprano Sax., Sax. Ensemble 1, 2, Synth. Sax, Synth. Lead 1, 2, 3, 4, 5, 6, 7; Chorus 1, 2, 3, 4, 5, 6, 7, 8, Vocal; Organ 1, 2, 3, 4, Jazz Organ 1, 2, 3, 4, Pop Organ 1, 2, Theatre Organ 1, 2, Accordion, Bandoneon; Piano 1, 2, Honky Tonk, Elec. Piano 1, 2, 3, 4, Harpsichord, Clavi., Clavichord; Guitar 1, 2, 3, 12 String Guitar, Banjo, Mandolin, Sitar, Shamisen, Elec. Guitar 1, 2, Muted Guitar, Distortion Guitar, Steel Guitar, Harp, Koto, Taisho Koto; Vibraphone, Glockenspiel, Celesta, Music Box, Marimba, Xylophone, Chime, Synth. Chime, Steel Drum; Cosmic 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16; Tutti 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; [Upper] Harmonica 1, 2; [Lower] Horn 1, 2, 3, 4, Muted Horn; User 1-16; 2 Dotted Buttons; [Upper] 115 Voices; [Lower] 118 Voices; Volume Fine; Brilliance
	Lead Voice 1	Violin 1, 2, 3, 4, 5, Pizz. Violin, Cello, Kokyu; Flute 1, 2, 3, 4, Piccolo, Recorder, Yokobue, Ocarina, Pan Flute, Shakuhachi, Whistle; Oboe 1, 2, 3, 4, English Horn 1, 2, Bassoon 1, 2, 3; Trumpet 1, 2, 3, 4, 5, 6, Muted Trumpet, Trombone 1, 2, 3, Muted Trombone, Flugel Horn, Euphonium; User 1-16; To Lower; Dotted Button; 34 Voices; Volume Fine; Brilliance
	Lead Voice 2 (VA)	V-Flute, V-Oboe, V-Clarinet, V-Sopra. Sax., Alto Sax., Tenor Sax., Breath Sax., V-Trumpet, V-Trombone, V-Shakuhachi, V-Kokyu, V-Sitar; Pan Pipe, Air Reed, Thin Reed, Grass Reed, Soft Reed, Buzz String, Bow Strings, Waspy Horn; Jazz Guitar, Picked Guitar, Saw Lead, Edge Lead, Dist. Lead, Woody Lead, Muted Lead, Talken Lead; Custom 1, 2, 3, 4, 5, 6; User 1-16; SOLO (Knee) Button; Dotted Button; 34 Voices; Volume Fine; Brilliance
	Pedalboard Voice 1, 2	Contrabass 1, 2, 3, Pizz. Bass, Upright Bass; Elec. Bass 1, 2, 3, 4, 5, Synth. Bass 1, 2, 3, 4, 5; Organ Bass 1, 2, 3, 4; Tuba, Timpani 1, 2, Timpani Roll; User 1-16; To Lower; Dotted Button; 19 Voices; Volume Fine; Brilliance
	Voice Display	Upper 1,2; Lower 1,2; Lead 1,2; Pedal 1,2; Manual Balance
Upper Flute Voice **Lower Flute Voice**		Flute Voices (16', 8', 51/3',4', 22/3', 2', 13/5', 1'); Attack (4', 22/3', 2'; Length; Mode: Each, First); Click; Response; Tremolo On/Off; Reverb; Volume; 8 Presets; 8 User Voices; On/Off Control: Upper, Lower
VOICE EDIT		On/Off; Operator 1, 2, 3, 4, 5, 6, 7, 8:(Output Level, Attack Rate, Decay 1 Rate, Decay 1 Level, Decay 2 Rate, Release Rate); AWM: (Output Level, Attack Rate, Decay Rate, Release Rate, Low, High); Operator Selectors; Operator On/Off Buttons; Save: User: 1 – 16; (From) Voice Disk; Voice Name
EFFECT/ CONDITION	**Digital Reverb**	3 Types: Room, Hall, Church; Length; Depth; Volume: Upper/Lower 1, 2, Flute Voice, Lead 1, 2, Pedal 1, 2, Accompaniment, Percussion; Set: Length, Depth
	Sustain	Upper (Knee), Lower (Knee), Pedal: Length
	Brilliance	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2: Control: Brilliant/Mellow
	Tremolo/Chorus	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2, Flute Voice; Tremolo (Fast): Speed; Chorus: Slow, Stop
	Symphonic/Celeste	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Mode: Symphonic/Celeste
	Vibrato	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2: Preset/User (Delay, Depth, Speed); Touch Vibrato
	Delay	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Control: Time, Feedback, Balance; Mode: Mono, Stereo 1, 2, 3
	Flanger	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Control: Speed, Feedback, Depth
	Distortion	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Control: Level, Hi-pass
	Glide	Upper 1, 2, Lower 1, 2, Lead 1, 2; Control: Time
	Lead Slide	On/Knee/Off; Control: Time
	Lead Tune	Tune Control
	Panning	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; (7 positions)
	Feet	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Preset 2' (Pedal Voices only)/4'/8'/16'

RHYTHM	**Rhythms**	March 1, 2, 3, Polka 1, 2, Country 1, 2, Broadway, Baroque; Waltz 1, 2, 3, 4, 5, Jazz Waltz 1, 2, 3, Bolero; Swing 1, 2, 3, 4, 5, 6, Jazz Ballad, Dixieland 1, 2; Bounce 1, 2, 3, Reggae 1, 2; Slow Rock 1, 2, 3; 8Beat 1, 2, 3, 4, 5, Dance Pop 1, 2, 3, 4; Tango 1, 2, 3; Mambo, Salsa, Chacha, Rhumba, Beguine; Samba 1, 2, 3, Bossanova 1, 2, 3; 16Beat 1, 2, 3, 4, 5, 16 Beat Funk 1, 2, 3; User 1-8 (A-D); 2 Dotted Buttons; 66 Rhythms; Volume Fine
	Variations	Fill-In; Intro. Ending; Lead In; Auto Variation: On/Off
	Others	Start; Synchro Start; Tempo; Bar/Beat LED; Condition: Reverb, Balance, Volume; Instrument: Tune, Pan, Reverb, Volume; Assign: Normal, Extend(ed), Copy Preset
RHYTHM PROGRAM	**Pattern Program**	On/Off; Step Write/Real Time Write; Beat (4/4, 3/4, 2/4); Quantize (♩, ♫, ♬, ♬, 3♫, 3♬, 3♬, Off); Metronome (On/Off); Assign (Normal/Extend); Edit: Instruments 1-16 (Change, Clear; Cursor); Accent Level 0-8; 120 Instruments; Accompaniment Select; Lower Rhythmic (Clear, Change, 16 Accompaniment Voices); Save: User 1-8 (A-D, Fill-In); (From) Pattern Disk; Pattern Name; Remaining Memory Display
	Rhythm Sequence	On/Off; Sequence 1-4; 120 Positions (Bar); Cursor Controls; Data: Preset/User (Set, Insert, Delete, Clear)
KEYBOARD PERCUSSION		Lower, Pedal On/Off: Lower Preset, Pedal Preset, User 1- 8; Copy: LK Preset, PK Preset, User; Assign: 120 Instruments, Clear
ACCOMPANIMENT	**Auto Bass Chord**	Mode: Off; Single Finger; Fingered Chord; Custom ABC; Memory: Lower, Pedal
	Accompaniments	Type 1, 2, 3, 4, All Off
MELODY ON CHORD		Mode: Off, 1, 2, 3; Knee: On/Off
BASIC REGISTRATION		1 – 5
REGISTRATION MEMORY		M./To Disk, 1-16; Disable Button; Mode: Off; Shift; Shift +; Jump; User (80 Positions; Cursor Controls: Data: Set, Insert, Delete, Clear; Shift End: Stop, Top, Next Song)
MUSIC DISK RECORDER		Play/Record: Upper, Lower, Pedal, Lead, Keyboard Percussion, Control; Pause, Stop, Fast Forward/Reverse, Song Select, Shift, Custom Play, Tempo; Format, Read & Auto Increment, Song Repeat; Song Delete; Song Copy: From/To; Disk Copy, Punch in Recording, XG Song Playback, XG Easy Converter, Song Name, Voice Disk, Pattern Disk, Remaining Memory; LED Display; Eject
FOOT SWITCH	**Left**	Mode: Off; Rhythm (Stop, Ending, Fill-In); Glide (Upper/Lower/Lead 1, 2; Time); Tremolo (On/Off);
	Right	Regist. Shift Mode: Off, Shift, Jump, User (80 Positions; Cursor Controls: Data: Set, Insert, Delete, Clear; Shift End: Stop, Top, Next Song)
KNEE LEVER		On/Off: Sustain (Upper, Lower); MOC; Lead Slide; Solo/Upper Mode
2ND EXP. PEDAL		Pitch Bend (On/Off: Upper/LeadPedal 1, 2; Range 1 -12); Tempo (Range 1 -12)
TRANSPOSE/PITCH		Transpose: -6 - +6; Pitch: 438.8Hz - 444.5Hz
LCD DISPLAY		480 x 160 Full Dot
OTHER CONTROLS		Power On/Off; Exp. Pedal (Right/Left Footswitches); 2nd ExpressionPedal; Pitch Control; Transpose; Master Volume; Display Select; Data Controls; Page; Coarse; Hold; LCD Contrast; MIDI (Output: Upper, Lower, Pedal; Int./Ext.: Lead, Sync., Exp.); Lead Initial Touch
OTHER FITTINGS		Registration Menu Disk; 3.5" Floppy Disk; To Authorized Service Personnel; Matching Bench; Keyboard Cover/Music Stand; Headphone Jack; Rhythm In (Phone; R/L); Aux Out (RCA; R/L, Phone; R/L); Aux In (RCA; R/L); Mic In; Mic. Volume; Mic. Reverb; MIDI IN/Out; To Host; Host Select
OPTIONAL ACCESSORIES		Voice Disk; Pattern Disk; HPE-170 Headphones; 3.5" Floppy Disks
SOUND SYSTEM	**Power Amplifiers**	216W (Stereo)
	Speakers	20cm x 2; 18cm x 2; 2.5cm x 2; Monitor 6.6cm x 2
DIMENSIONS	**Width x Depth x Height**	114.9cm x 55.6cm x 98.0cm *With Keyboard Cover Closed
WEIGHT		103kg, Bench: 10kg

Specifications and description in this Owner's Manual are information purposes only.
Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice.
As specifications, equipment or options may not be the same in every locale, please check with Yamaha dealer.

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured makings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

(2 wires)

• This applies only to products distributed by Yamaha-Kemble Music (U.K.) Ltd.

For details of products, please contact your nearest Yamaha or the authorized distributor listed below.

EUROPE

THE UNITED KINGDOM
Yamaha-Kemble Music (U.K.) Ltd.
Sherbourne Drive, Tilbrook, Milton Keynes,
MK7 8BL, England
Tel: 01908-366700

OTHER EUROPEAN COUNTRIES
Yamaha Corporation,
Pro Audio & Digital Musical Instrument Division
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: 053-460-3273

CENTRAL & SOUTH AMERICA

MEXICO
Yamaha de Mexico S.A. De C.V.,
Departamento de ventas
Javier Rojo Gomez No.1149, Col. Gpe Del
Moral, Deleg. Iztapalapa, 09300 Mexico, D.F.
Tel: 686-00-33

BRAZIL
Yamaha Musical do Brasil LTDA.
Av. Rebouças 2636, São Paulo, Brasil
Tel: 011-853-1377

ARGENTINA
Yamaha Music Argentina S.A.
Viamonte 1145 Piso2-B 1053,
Buenos Aires, Argentina
Tel: 1-4371-7021

PANAMA AND OTHER LATIN AMERICAN COUNTRIES/ CARIBBEAN COUNTRIES
Yamaha de Panama S.A.
Torre Banco General, Piso 7, Urbanización Marbella,
Calle 47 y Aquilino de la Guardia,
Ciudad de Panamá, Panamá
Tel: 507-269-5311

AFRICA

Yamaha Corporation,
Asia-Pacific Music Marketing Group
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: 053-460-2312

MIDDLE EAST

* Except Turky and Cyprus

Yamaha Music Gulf FZE
LB21-128 Jebel Ali Freezone
P.O.Box 17328, Dubai, U.A.E.
Tel: 971-4-881-5868

ASIA

HONG KONG
Tom Lee Music Co., Ltd.
11/F., Silvercord Tower 1, 30 Canton Road,
Tsimshatsui, Kowloon, Hong Kong
Tel: 2737-7688

INDONESIA
PT. Yamaha Music Indonesia (Distributor)
PT. Nusantik
Gedung Yamaha Music Center, Jalan Jend. Gatot
Subroto Kav. 4, Jakarta 12930, Indonesia
Tel: 21-520-2577

KOREA
Cosmos Corporation
1461-9, Seocho Dong, Seocho Gu, Seoul, Korea
Tel: 02-3486-0011

MALAYSIA
Yamaha Music Malaysia, Sdn., Bhd.
Lot 8, Jalan Perbandaran, 47301 Kelana Jaya,
Petaling Jaya, Selangor, Malaysia
Tel: 3-703-0900

PHILIPPINES
Yupangco Music Corporation
339 Gil J. Puyat Avenue, P.O. Box 885 MCPO,
Makati, Metro Manila, Philippines
Tel: 819-7551

SINGAPORE
Yamaha Music Asia Pte., Ltd.
11 Ubi Road #06-00, Meiban Industrial Building,
Singapore
Tel: 65-747-4374

TAIWAN
Yamaha KHS Music Co., Ltd.
10F, 150, Tun-Hwa Northroad,
Taipei, Taiwan, R.O.C.
Tel: 02-2713-8999

THAILAND
Siam Music Yamaha Co., Ltd.
121/60-61 RS Tower 17th Floor,
Ratchadaphisek RD., Dindaeng,
Bangkok 10320, Thailand
Tel: 02-641-2951

THE PEOPLE'S REPUBLIC OF CHINA AND OTHER ASIAN COUNTRIES
Yamaha Corporation,
Asia-Pacific Music Marketing Group
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: 053-460-2317

OCEANIA

AUSTRALIA
Yamaha Music Australia Pty. Ltd.
Level 1, 99 Queensbridge Street, Southbank,
Victoria 3006, Australia
Tel: 3-9693-5111

NEW ZEALAND
Music Houses of N.Z. Ltd.
146/148 Captain Springs Road, Te Papapa,
Auckland, New Zealand
Tel: 9-634-0099

COUNTRIES AND TRUST TERRITORIES IN PACIFIC OCEAN
Yamaha Corporation,
Asia-Pacific Music Marketing Group
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: 053-460-2312

HEAD OFFICE

EUROPE & OCEANIA
Yamaha Corporation, Pro Audio & Digital Musical Instrument Division
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: 053-460-3273

CENTRAL & SOUTH AMERICA, AFRICA, MIDDLE EAST, ASIA
Yamaha Corporation, Asia-Pacific Music Marketing Group
Nakazawa-cho 10-1, Hamamatsu, Japan 430-8650
Tel: 053-460-2317

YAMAHA

Yamaha Manual Library (English versions only)
http://www2.yamaha.co.jp/manual/english/

This document is printed on chlorine free (ECF) paper with soy ink.

M.D.G., Pro Audio & Digital Musical Instrument Division, Yamaha Corporation

Printed in Japan

V706290 ???